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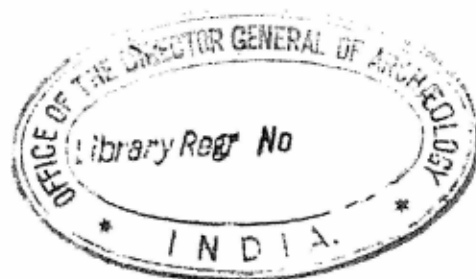


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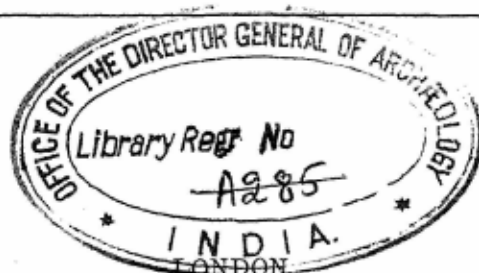
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ADDRESS BY THE PRESIDENT, MR. ERNEST NEWTON, A.R.A.,
at the Opening General Meeting, Monday, 6th November, 1916.

LADIES AND GENTLEMEN,—In the ordinary course of events I should at this moment be listening to my successor in office with that peculiar relish which an actor feels when he steps from the stage and, seated amongst the audience, watches the new player sustaining the rôle which had hitherto been his. Circumstances have, however, willed it that my tenure of office should be prolonged, and that, for the third time, I should be addressing you as President.

So far as the ordinary work of the Royal Institute is concerned the history of the past year has been almost without events. The Council and the Committees have met as usual, and have dealt with the necessary business.

One matter that has engaged our attention has been the resumption by the Commonwealth Government of the Competition for the Canberra Parliament House. You will remember that this competition, which was to be International, was postponed at the outbreak of the War. It is difficult to understand why it should be resumed now, when all the young architects of the Empire and of the Allied Countries are engaged in other and sterner duties. We have felt compelled to protest very strongly against the resumption, and have also communicated our views to the two leading French Societies. I need not here go into the matter in detail, as you will find the correspondence in the JOURNAL.

The War Committees have been active, and the Civic Survey has continued its most useful work. It is gratifying to know that the small exhibition held by the latter at the Congress of the Sanitary Institute some little time ago created great interest, and it is hoped that a more complete Exhibition may be held in our own rooms early next year.

Our anxieties as to the future have, of course, not been lessened by the action which the Government was compelled to take last July in issuing an Order in Council controlling private building for a time, in order not only to keep steel for the purposes of the war, but to secure building labour for urgent work in connection with munition buildings and other vitally necessary national undertakings. It was necessary, too, to relieve the railways as far as possible from the carriage of building materials. The Ministry of Munitions, which has the carrying out of this difficult and delicate task, realises the effect of this control on all those connected with the great industry of building; and, without being indiscreet, I may say that its attitude is most sympathetic. Every effort is made to adjust the conflicting claims of individuals and the State, but, of course, the State has, and must have, the first claim. By the adoption of a system of inspection it has been possible to ensure that no building in course of erection is stopped arbitrarily and without due regard being given to its protection and security. In many cases it has been found possible to continue the work until enough has been done

to enable the building to be made use of. In other cases, where the structure was nearing completion, it has been found possible to roof it and to finish the interior as, for the moment at any rate, it is only certain classes of labour that are required for State purposes.

I should like to enlarge on this subject, but, for reasons which I think you will readily understand and appreciate, I feel that it is better to avoid going very closely into details. I can, however, assure you that every case is gone into carefully and examined from every point of view, and that it is of value to have these cases considered from the technical standpoint. The staff is composed of architects accustomed to deal with buildings of every kind, and every effort is made to administer the Order with scrupulous fairness. It is perhaps hardly necessary for me to tell you that this work is not done in the traditional office hours of 10 to 4 with a two-hour lunch interval. It would be comforting to be able to give some idea of the duration of this control, but, although I am sure it will be relaxed at the first possible moment, no one can forecast future developments.

You will have noticed, no doubt, that the Ministry, through the Press, has made the thoughtful and timely suggestion that the public would do well to take advantage of the lull in building operations to get plans prepared now for future schemes. If this advice is followed generally it will help architects to tide over this difficult period, and we must hope that the *diminuendo* will be followed by a *crescendo* and a long *forte fortissimo* passage.

It cannot, however, be denied that the outlook for architects at the present moment is not very brilliant, but at a time like this everyone can do something, and if there is little or no architectural work to be done we can do a thousand-and-one other things. Our training tends to make us versatile. We already have some architects making shells and aeroplanes, others making explosives, and some even navigating barges for the carriage of munitions. There is man's work to do in many directions—in offices, on the land, everywhere. The work of hundreds of supposed "indispensable" young men can be done, and done well, by architects of intelligence and ability. Our practice obliges us to have an insight into everybody's business. We have made a large contribution of our young men to the Army, and we old ones are not going to sit still and bewail our fate just because for the moment there is no market for our special "line." If our young men can serve in the ranks, we can serve in the ranks too—not in the trenches, but in offices, factories, anywhere where our work is wanted, and where we can release a young man to take his place in the fighting line.

Almost since the war began, certainly from the first winter, our newspapers have been full of paragraphs, cunningly disseminated by Germany and innocently printed by the British Press, stating that Germany was so short of men that she was driven to take the halt, the blind, and the maimed into the Army. Then accounts of food riots, mutinies, loss of *moral*, follow each other at discreet intervals. All these crafty tricks are intended to cause a slackening of effort here, and they have not been entirely without result. I think no one who follows events intelligently can have any doubt about the future if only we realise that *now* is the time not for slackening for an instant, but for a supreme effort. We have to put every ounce into the scale. Everyone must do something or suffer something. There are a thousand ways of losing, but only one way of winning, and the one way is to concentrate all our energies on the war, to will victory and to work for it, to realise that the power of Germany is only beginning to be broken, and that the victorious end will come about not only by the valour of our Navy and Army, but by the work of every man and woman in the country.

Although I have said our one duty is to concentrate all our efforts on the prosecution of the war to a victorious end, that does not mean that we should not think of wise plans for the future. This can be our recreation. I have a shrewd notion, however, that whatever schemes we may work out, our future will be determined for us by the men who have done the fighting. We read perhaps a little too much of plans for "trade after the war." Too much thought and energy are being put into these schemes for a future over which we have no control. It is to be hoped, however, that in these vast commercial projects the claims of the workers, now the fighters, are not overlooked. It will be a

disgrace to us as a nation if after the war we are content to let them live in the drab and dreary districts which many people seem to look upon as the inevitable type of district for a working population. In London alone we have square miles to destroy and replan. Our people must not only have the same pleasant surroundings which we consider indispensable for ourselves, but they must earn enough and have leisure enough to enable them to enjoy life. The amount spent on the war in one week would be enough to sweep away many of these dreary neighbourhoods and replace them by cheerful streets and squares of pleasant and comely houses.

When once the citizens of London begin to realise the disgrace of squalor and ugliness the architect will come into his own again. It is not only the outlying districts that cry aloud for change. We have a glaring example in the very centre of London, and, thanks mainly to the untiring energy of Sir Aston Webb and the London Society, we seem within measurable distance of carrying out a great scheme for sweeping away Charing Cross railway bridge and replacing it with a fine road bridge worthy of our great city. It is a most hopeful sign that Parliament, which still reflects public opinion, is on the side of the improvers. Possibly the number of those who care much for a beautiful city is small, but if the rest of the community at any rate can be brought to see that there is a commercial value in architecture, and that it pays to have a fine city with great streets and squares and fine bridges, the money difficulty, which is the rock on which so many schemes have suffered shipwreck, will be negotiated safely. The series of articles in the *Observer*, by Mr. John Burns, Sir Aston Webb, and Mr. Reginald Blomfield, will help immensely to attract public attention to the subject and to give an air of reality and nearness of realisation to a project which has been discussed for several years. It is hardly necessary to say that the Institute gives its complete and unreserved support to a scheme for effecting so great an improvement.

Other great projects will have to be taken in hand after the war, and we can console ourselves during the lean time of the present by dreaming dreams of the great things we are to do in the future. If the war is to lead to a change in the surroundings of the workers, it is clear, too, that there will be changes in the methods of work. The Trade Unions, for the purposes of the war, have given up their "customs" on the distinct pledge that after the war they shall be at liberty to resume them. I know very little at first hand about these customs, but I have been told that so far as the building trade is concerned they are based on the assumption that limiting the amount of a man's output is the only way to make the work go round so that each man may have a share, the idea being that there is a certain average amount of work per annum and an ascertained number of men to do it. I believe this to be quite unsound. Limiting the amount of work a man can reasonably do not only keeps skilled men at the level of less skilled, but makes building cost more, so that less is done. Many, many years ago I suggested a system of two classes of workers. The more skilled of first class were to work quite unfettered and to receive higher wages; the second class, also unfettered, would receive less. The incentive for the second-class man to improve himself so as to be promoted to the first class would be great. The result would be more output, better-paid work, and a levelling up instead of down. This was a very juvenile effort on my part, and I am not even sure that it was original, but I still believe it has the germs of soundness, and that the Trades Unions, with their fine organisation, could do something on these lines.

Other changes and other reorganisations must also be taken in hand if we ever again have to cope with a situation which requires the whole organised strength and skill of the community. We have at the present moment completely organised societies, institutes, and associations of architects, engineers, and of scientific men of all kinds, but they are all isolated links with nothing to bind them into a chain. If, instead of this isolation, all these societies were linked together as part of a State organisation ready for use in a case of emergency, the Government would have ready to hand the whole machinery of these organisations and could put their hands on the men they wanted and get all the information they required in a few hours. Suppose that this organisation had been in existence

when war broke out. Representatives of all these bodies would have been summoned. The Institute would have been entrusted with work proper to architects. Engineers would have been allocated their work, chemists theirs, and all without waste, overlapping, or confusion, because the machinery was already in working order.

The amount of help that the civil organisations could give to the Government is incalculable; I cannot, of course, speak for other bodies, nor do I know to what extent their organisation was made use of, but so far as the Institute is concerned, I can say that we were ready directly the war broke out, and that not only then, but more than once later the whole of our machinery was placed at the disposal of the Government, and I have no hesitation in saying that had we been made use of many delays and mistakes would have been avoided and much expense saved. I have lately had the duty of examining vast numbers of plans which have ranged from cottages to factories covering acres; every type of construction is represented, proving, if proof were required, that we have men competent to design and carry out on proper business and economical lines every known type of building.

Although we properly regret that so little use has been made of us as an organised body, and are inclined to blame the authorities for their shortsightedness, we must remember that because of the lack of touch which I have before referred to, we were strangers to the Government—and, after all, Governments are like individuals, and have a dread of the unknown. It is always so much easier to go along the well-known tracks. We all have our favourite builders, to whom we like to entrust our work, and view a strange contractor with disquiet until he, in his turn, has proved his worth. It was then natural perhaps, though regrettable, that when the emergency arose the unknown path was avoided. It must be part of our work in the future to forge the connecting link so that if ever again a like emergency should arise we should find ourselves called upon and ready to place our skill and experience at the service of the State.

As is perhaps natural, I fear I have so far considered the war mainly as it affects us as architects, but although as islanders, whose country so far has been free from the invader, it is a little difficult to imagine what it must mean to those countries where the actual fighting is going on, we must not think only of our own sorrows and tragedies. Think how Belgium has suffered, and of the woes of our great ally, France, dear to us architects; and of Russia, the mysterious, which is being freed and regenerated by the blood of her sons; and of Italy, whose very name warms our hearts; of Serbia and Roumania—all have suffered, and are suffering even more than we are, and are giving up all present happiness now, so that future generations shall be free and at peace.

I cannot conclude without expressing my most heartfelt sympathy with those who have been bereaved. Their sorrow will be mingled with pride at the thought that their dear ones have given their lives for their country. All of us whose sons are serving live in constant anxiety, and we can only hope that the great sacrifices that we are called upon to make may bear fruit, and that the discipline and sorrow of the present may make us a strong and earnest race to carry on the work of the world in the future.

VOTE OF THANKS TO THE PRESIDENT.

Professor BERESFORD PITE [F.].—Mr. President, Ladies and Gentlemen: It falls to my lot to have the honour of proposing a hearty vote of thanks from the Institute to the President for his Address. I am sure that the note which the President has struck again to-day, that note of dignified and hearty patriotism, has been quite the right note for the occasion and the note that this Institute most warmly welcomes and to which it most truly responds. The gratitude that we are under to the President for the earnest and constant attention which he has given to the prime requirements of the nation at the hands of our profession is one that we appreciate. And I think, Sir, in spite of the great difficulties and trials of your years of office, the peculiar services which you have rendered to the profession under these most trying circumstances are sure to be remembered and valued.

I may be permitted to remark on one or two points in the Address. First, with regard to the Australian Competition, which came so early in your remarks. Of course, that position is a very difficult one, and one with which we are very closely connected. It is evidently impossible that the architects of the Allied nations should be able to give the attention that they would wish to give, the study and the care that they feel this great problem of Australia demands from them, and we deplore it. But I cannot help feeling that, on the other hand, we must bear in mind this fact: that Australia wants to start these buildings as soon as the war is over. When the war is over, the return of labour demanding employment will be very considerable indeed; and one can quite imagine that they will be unwilling to wait the one or two years which the preparation of the Competition and working drawings would entail before starting such an important work. And it seems to me that the only result, under the present circumstances, will be to give the job away to those who are not engaged on the side of the Allies—to the neutrals, or even to the enemy himself if he can be induced to compete. Any such conclusion of the matter would be as disastrous as it can well be. The only suggestion I can make, Sir, is that we should urge upon the Australian Government, under the circumstances, the great importance of abandoning the Competition altogether, and making up their minds to commission an architect well qualified to carry out the work, as the proper and most satisfactory way, under the circumstances, of arriving at a conclusion.

With regard to the whole question of professional relief and the preparation of the Civic Survey Plan, speaking among ourselves, we do feel a great debt of gratitude to the Committee which has organised and which is taking the opportunity of employing highly valuable and suitable skill in the preparation of what, I hope, will be a work of monumental and real importance. The opportunity is a unique one, and our

thanks are certainly due to those who have organised this admirable and successful movement.

With regard to the future, Sir: the future is, of course, a difficulty with us. But we are getting reconciled to smaller incomes and to narrower means of life with a number of domestic novelties; and I do not imagine that during our lifetime we shall see much opportunity of altering the scale to which we are being reduced. I would only, speaking with considerable feeling as a suffering member of the profession, appeal for the possibility of lowering the rate of subscription of the Fellowship to the rate which Associates now pay, because it seems to me there is not the slightest difference between the status and the privileges of those two orders. But that, of course, I have to leave to the Council. Under the present conditions of compelled economy one sees how important it is that the Institute should have a policy of professional concentration. I should hope that the tendency which has been exhibited during the past few years to multiply professional societies may be taken seriously to heart by the Institute, and that there may be a policy of concentration prepared during this period of pause in architectural activity, so that all the members of the profession may feel, without the struggle of supporting not only the central Institute but also many allied societies, that we are able to economise our subscriptions, to concentrate our forces, and to strengthen the Institute in its representation of the profession. I need not refer in any detail to the bodies which have suffered from the war very much more than ourselves. But I can anticipate that if a helping hand is held out, for instance, to the Architectural Association in its peculiar and most interesting circumstances, and if attention is given by this Institute to the great public matter of town planning—which has called into existence an Institute of its own, but which I would much sooner have seen a branch of this Institute; if the Institute could stretch out its hand to the larger subjects upon which you have commented so clearly in your Address—the need of improved dwellings and increased amenities, the need of sweetening and cleaning homes for our workers, and healing the sore places in our towns—I say if the Institute can concentrate on a policy of public action, uniting itself to the bodies which are engaged in these works, then there is a future for us, in spite of our limited means, of great usefulness and public importance, and there is hope of strength from union, instead of a narrowed usefulness, for us in the future.

But with regard to our own personal activities in a time when there is no work to do, I think, Sir, we may remind ourselves that a century ago, during the great European War, was a time when architectural students and archaeologists were peculiarly active, and engaged on most important work. If we cast our minds back and reflect on what was going on at that period we shall find that the tremendous change which came over

the outlook of English architecture took place then. The great war killed the old English tradition; it stopped the architectural clock; and it was in that period of stagnation and quiet that the great Greek Revival culminated and came to our shores. Winckelmann had been at work, and others, preparing the way; it was not a novelty which came from the blue. Great students—Cockerell and others—were busy at that time in the Ægean with the Elgin Marbles, and Greek treasures were being collected and gathered and brought to England. From that moment English Art during the whole of the last century started to move and develop. What is in the air for us now we do not know; but it is clear that the war which is now on will have more gigantic effects upon our outlook, our position, and our future than even the great war of a century ago had. And I beg architects and students to recall the opportunities in their possession of exercising an art which is universal, an art which looks back over the whole history of the human race; an art which is bounded in its periods by such struggles as that with which we are concerned, and an art which expresses by every aspect of it—in its civil, its religious, its military aspect—the permanent activities of its own age. I ask architects of the present day to concentrate upon that outlook, upon that review, and to seek in this period to attain an ideal—a considered, intelligent, critical ideal—of a sane scope and sphere for their art; to try to relate their work to the real necessities and real expression of the age in which they live, so that we may not come out of this merely holding our breath, merely waking as from a dream, but that we may come out of this period and its trial with a newer, purer, more powerful intention to fulfil ourselves in our art, to make our art representative of the great race of which, thank God, we form part, and of the great era in which He has called us to live.—I very heartily and earnestly beg to move that the best thanks of the Institute be given to the President for his Address.

Captain R. BURNS DICK, Royal Garrison Artillery (President of the Northern Architectural Association).—Mr. President, Ladies, and Gentlemen: To be suddenly honoured by an invitation to take part in this important meeting by seconding the vote of thanks to the President came as a startling reminder that I had a past and that my present changed existence had not cut me off from it. But I rather shrink from an active incursion into that world that now seems so unfamiliar and my first impulse was to "regret my inability, &c., &c." However, I found the idea taking hold of me, and there kept recurring to my mind a sentence from a letter I had recently read in M. Jacques-Emile Blanche's *Cahiers d'un Artiste*, written to him from the trenches by an artist friend: "Quelle joie de redevenir soi-même pendant quelques instants!" Why not take advantage of the chance to feel some of the joy of meeting old friends and breathing the old and congenial atmosphere "pendant

quelques instants"? I recalled with a peculiar pleasure the first two or three Council meetings I attended in 1914, presided over by the President of to-day, and then found myself ringing up the C.R.A. for forty-eight hours' leave.

But now that I am here I confess to a feeling of strangeness, for during two years my thoughts have been entirely diverted to the new life, and I fear I come ill equipped to say anything of interest worthy of the occasion. The paramount feeling has been to get this ghastly business over. What does architecture, what does anything matter so long as the nation's very existence is at stake? But after all, I remind myself, this is not the end of all things: the R.I.B.A. still exists, and a very active President is going to give a Presidential Address, even if the great nations are toppling over and burying the peoples in their ruins.

With these thoughts in my mind I strolled out the other evening under the shadow of a great gun, its Titan mass, perched on its revolving platform high above me, silhouetted against a starlit sky and pointing over the impenetrable deep; whilst from numerous points inland shot overhead thin, bright, expanding and unending beams of white light, crossing and intermingling as they searched in every direction the new highways in the heavens that man has conquered by his restless daring.

The occasional challenge of a sentry only intensified the stillness and vastness that penetrated the soul with its awe-inspiring sublimity. But over and beyond the silence and darkness hanging over vast oceans and continents I knew was spread the evil spirit of strife and woe and destruction. Could anything have carried one farther from the now insignificant things of the past—the curious, trifling little things, little people, little thoughts, all once so big, now so shrunken?

With an effort I returned to my thoughts of to-day's meeting: The President is going to give an address. But what, I wonder, will he say? What line will he take? How will he—a creator of beautiful works, with the soul of the artist, if practical in the sense that knows how to infuse into fitness the elements of grace—how will he regard this business so overwhelmingly in possession of earth and sky and sea, these forces of madness and destruction let loose by man on man? Will he be able to carry us through the storm and preserve us for that time when wise and sane guidance will be required for the great renaissance?

He has given the answer to these questions in a way I never really doubted. I have learned of the strenuous life he leads in connection with real war work, yet has he found time to give us of his wisdom in the all too short address we have just heard. The attitude of mind it reveals is to me, if I may say so with all humility, entirely satisfying. Two sentences appear to epitomise the position, and might well be kept in mind by those of us who are "carrying on" until that army of youth and vigour, on whom rests the moulding of the new epoch, returns to take up its greater and

happier work. These are the words I mean: "I have a shrewd notion that, whatever scheme we may work out, our future will be determined for us by the men who have done the fighting. Too much thought and energy are being put into these schemes for a future over which we have no control." Yes, the future is out of our hands. Carry on we must to a certain extent, but the work for which the Institute mainly exists must cease for the time being. A passive submission must be ours so far as the shaping of the future is concerned, with the mind and imagination cleared of all preconceived ideas, ready to be influenced by the new forces now working to some great purpose not yet clearly defined.

Recently, during gun practice, I observed the effects of the "blast" from a gun on a small structure near by, whose door and windows had been securely closed. By the shock of concussion the door was torn from its fastenings, split in two and cast into the interior; windows were broken and the structure seriously shaken. Now if door and windows had been left open, little injury would have resulted. There, it seemed to me, was an excellent illustration of what would happen to universities, institutes, and every centre of social, educational, and industrial activity that closed their doors to the effects of the thunder of present events. Either let the hurricane blast sweep through, carrying with it the dust and decay of the past and clearing the way for the new activity, or be content to see the fabric itself swept out of existence.

Those millions who are facing untold horrors, losing so many of their best by the mighty sweep of the scythe in the hands of the Dread Reaper, but who at times are catching glimpses of the unknown, and who are feeling the strange exaltation of a new-born freedom, are coming back with a new and widened outlook, with a determination to get out of life that something that they only now are beginning to realise is possible to them and is theirs by a right they have earned. It is they who will shape the future. Don't give them the trouble of brushing us aside: let us be ready to aid in the quest for these higher ideals when the time arrives.

We architects, in our own sphere, must remember that the great works we are concerned in are not of our creation. Pericles was more responsible for the great monuments in Athens than was Ictinus and his fellow craftsmen. But the real creators were neither Pericles nor his artists and engineers. These great works were the creation of the nation's manhood, and the beauty which still survives is the permeating soul of the men who faced unflinchingly the invading hosts of a greedy and power-drunken enemy.

No, ours is the business to take the material that is being created and give to it an expression of grace and fitness worthy of the industry and intelligence that have produced it, and which demand from us the ability to make it suitably articulate.

I often think that in this we lag behind the march of the nation's energies. True, the people themselves

have failed hitherto to be persuaded of the value of this aspect of their productiveness, to us a strange shortsightedness. But, allowing for this, we do not always take advantage of the opportunities offered. Science and Industry do not hesitate to scrap those things that new methods and inventions have superseded, whereas we so often hark back to old forms, trying to twist and bend them to uses to which forms, trying to twist and bend them to uses to which they are quite foreign; we keep trying to force into old moulds new needs, distorting and hampering the free play of their natural tendencies. This has perhaps been inevitable, but somehow I fancy a period is being put by present events to many shibboleths that have tied us to those things that should long ago have been securely walled up in the museums from which they have been dragged by pedantic and unimaginative leaders in every sphere.

In this connection a little thought—perhaps a big heresy—insinuates itself, which I will only whisper: Is there any chance that we and our wonderful Allies *d'outre Manche* with our coming renewal of youth will feel the inappropriateness of still wrapping round a no longer enfeebled body that old garment the "Renaissance," patched with so many faded periods from the creaking loom of the centuries? But this by the way.

It is the nation itself that is at last working out its own salvation on the battlefield; it is the people themselves who will have saved their country; and it is these same people who, having realised their power, will see that where no cost was considered too great to ensure the defeat of the enemy outside the gate, no narrow question of money will be allowed to defeat their legitimate desire for relief from the sordid conditions that disgrace every large industrial centre within. Then will be given to us an opportunity for wise counsel in conjunction with the bolder outlook of our sons returned.

A brighter time will dawn, and the sorrow and sacrifice are not in vain. I have a whole-hearted belief that those better things for the future so ardently hoped for by the President are in the process of conception and will assuredly see the light of day.

I most heartily congratulate the President on the vitality that enables him to accomplish so much valuable work for the State at this time of crisis, and I most cordially second the vote of thanks to him for his wise words to-day, so ably proposed by Professor Beresford Pite.

Mr. H. G. IBBERSON [F.]—The portion of the Address which was perhaps received with most enthusiasm was that advocating a more gracious *home* life for the industrial classes. Might I suggest that an effort should be made to give some of them a more interesting *working* life also? Cannot this Institute put a little pressure on the Government, and induce it to foster by alms and influence the attempts that are being made to keep alive the handicrafts, the really

entertaining things? Without Government help, in the lean years which are before us, so many of these small industries must go to the wall. They will die. And does not the present Arts and Crafts Exhibition show they are worth keeping alive?

You probably say the idea is stale and impracticable: I know it is stale—old at any rate—but is it as impracticable now as it was in the days of Morris? We are used to being interfered with and even helped by Government; if they foster the making of the dyes, why not the hand-loom weaving of the cloth? It is only by unity, and unity nowadays means Government, that we can work out this industrial salvation for a few of our people; the majority will be content with improved houses, better wages, and shorter hours.

Referring to an inference in the President's speech that the building trade is being gently treated by the State—suppressed in all kindness—may I say that only one behind the scenes, as I am, can know how largely this new humanity is owing to the precepts and presence of Mr. Newton himself?

Professor W. R. LETHABY [F.]: May I say a word in support of the resolution? I do feel that we want some sort of interim work to carry on here at the Institute. I fully agree that this is not the time for the full programme of evening meetings, but I feel that we need to be kept together from time to time by some interim work, and so I wondered whether it would be possible to hold some sort of informal conferences, strictly among architects, with the hope and intention that we could do something to heal up the internal anarchy of style from which we suffer, more particularly with regard to City works. The country houses are open to whims, and I have no very visionary ideas that much might be done in regard to them. But much might be done, I think, if we were to set about considering the City as a whole, from the point of view of the architectural design. By that I do not mean City planning, on which such splendid work is being done, but units of design which go to make up the architecture of city streets. If bodies of architects could walk down the Strand and down Holborn, and see what all the architectural fuss during the last sixty years has produced, they might wake up to the feeling that something must be done from the public point of view. It is not a question of the whims, the ability, or the genius of the architect: it is a matter of the City as a whole, and something ought to be done from the point of view of the City. And I throw that out as a suggestion, whether something might not be accomplished by small conferences to get round the difficult corner of these conflicting styles, and try to bring about some common platform of view with

regard to buildings in the City. In the same way, we ought to join in other efforts, like the mitigation of the tremendous and terrific advertising plague. Nothing can be done to live in a city which allows advertisements in this way: it is pure anarchy, business blackguardism. It is not thinkable of any ordinary city in the world. In neither America, nor Germany, nor France is it possible, and it must not be possible here. It is not a question of this or that: it is a question of survival: for if we go on in this callous way we shall not survive—indeed, I do not know that it will be worth surviving. Something must be done, and I invite the Institute to help in tackling that.

One little practical point I might further suggest, which might help in the convergence of such a public idea of architectural propriety, or whatever you like to call it. Might not the Institute consider the old status of the creature called the Surveyor-General, and how he came to lapse? I refer to the men in a responsible public capacity—Inigo Jones, Wren, Nicholas Hawksmoor, Sir Robert Taylor, and so on right to the beginning of the last century: the most powerful men in the country held the office of Surveyor-General. In some way that lapsed, and the work was taken up by a clerk of the works, or someone else of office-boy standing, and the whole chain of dignity in public work which it typified went by the board. One may speak of this with freedom just now, as by some accident able men seem to fill the position, but this is by accident not by system. I do suggest, as a technical possibility, that the Institute should consider the past status of that official, and the possibility of his revival, or something parallel.

The vote was carried by acclamation.

The PRESIDENT, in acknowledging the vote, said: I cannot conclude without thanking you very much, Professor Pite, for the kind words you have used in proposing this vote of thanks, and Captain Burns Dick for the kind way in which he has seconded it. It is a great pleasure to see him even for a moment restored to civil life. And the suggestions which Professor Lethaby has thrown out will, I think, be likely to bear fruit in the future. It is very difficult to devise anything to keep the Institute going through war time. We are not able to have evening meetings, and there is a difficulty in arranging meetings even for the afternoons. I think most of us felt that the ordinary subjects of papers were a little bit dull and stale during war time. But these conferences, if we did not perhaps take them too seriously, if they could be more in the nature of afternoon tea conferences, with smoking permitted, I think we might profitably organise.

THE ARTS AND CRAFTS EXHIBITION.

By A. E. RICHARDSON [F.].

THIS noteworthy exhibition has now been open for a month, and will continue for another fortnight. What it will achieve is impossible to state; its purpose, however, is momentous, for it marks the tertiary stage of the adventure entered upon by William Morris and his band of dreamers. After several visits to the galleries of the Royal Academy it is not so difficult to grasp the meaning of the movement as a whole, and to assume that attitude of disinterested attachment essential to a reviewer; neither is it necessary to have recourse to the excellent Catalogue edited by Mr. Wilson, for the simplicity of the arrangements begins to tell above the blend of colour and seeming confusion. This wonderful show resembles a huge bazaar transported from the Orient to enliven the grey North: so much to the credit of the artists who have endeavoured to add to the amenities of domestic life. There are, notwithstanding, certain reservations, and these will be duly stated. The scope of the Society embraces all the arts, nothing is considered too small to escape attention, hence the widespread appreciation aroused in all quarters through the courage of those enthusiasts who have chosen the present time to proclaim their mission, and it is hard to record an impression of the numerous works without sympathetic emotion. In the main the exhibition is a legitimate attempt to uplift the general tone of artistic product: its object is educational; herein is revealed its secret and its shortcomings, for the artists brought together from the ends of England, while professing high intellectuality, have not yet imbibed the rudiments of discipline. The impetus at the back of the movement and the achievements of the artists are the best safeguards against indiscriminate remarks; no purpose would be achieved by any other than constructive criticism, and once the mind is freed from prejudice against the fantastic tendencies which still persist, the conflict of old theories with modern æstheticism, misplaced originality and strained thought, the sober qualities underlying the works of this coterie of artists make a direct appeal.

Like most other institutions organised for the common good, the Society labours under the disadvantage of having to create an appreciative audience; there is no definite idea of whom the patrons will be composed. In consequence the generality of the goods are beyond the reach of the industrial pocket: they may be coveted by certain members of the middle class, but they are scarcely needed by the cultured rich who possess historical treasures: the excellence of the workmanship and the technique of the articles raises the selling price far above the average purse, and so a new body of customers, recruited from the well-to-do middle class and the newly rich, is importuned to spend money. The majority of the artists whose works are on show

have no true perspective of social conditions or humility of bearing towards the scope of art, doubtless because no director is at the head of affairs to organise their talents or to interpret popular needs; and they should bear in mind that the majority of the public desire modest flowers, not rare orchids. Here another view of the case is presented, that of design. Among the artists a curious doctrine prevails decreeing the art of the peasant to be the only panacea fit to remedy immature taste: this is equivalent to the theory that all ranks of society are constituted alike. The artists are devout in their beliefs, but lack both discipline and comprehensive education, hence they seek to create a new fashion arising entirely out of craftsmanship. They recognise in a superficial way the excellences of design associated with the noblest phases of tradition; and while their works are models of sound construction, the sense of form is lamentable. It has been stated that concept and design are attributes of superlatively higher value than construction or technique; on that reasoning idealistic beauty, elegance of form, charm and character indubitably belong to a sphere of things the craftsman can never attain without reasonable examples to work upon, and from them design anew; but to expect these attributes to thrive without the magic fertiliser of tradition is to imagine a vain thing.

This tendency to create a new order of things, to inspire a fresh fashion, to think hard and intellectually, where quiet reasoning alone is needed, borders dangerously near the attitude of the *poseur*, and leads inevitably to a depressing *cul de sac*. In this exhibition the desire for a new vogue which shall be stronger than fashion has produced a fresh æsthetic cult, which in some respects resembles a grafting of Futuristic imaginings on the sturdy tree planted by William Morris. The movement is theoretically sound, but this strange blending of opposites combined with doubtful experiments will not promote a healthy development. To architects especially the basic aims of the Society should appeal. Here at last is a band of artist craftsmen, the vanguard of what promises to be a great army awaiting employment. There is nothing to prevent these men from engaging upon the embellishment of buildings under the direction of a master whose control is indisputable and whose chief duty is to advise his co-workers. They would welcome the opportunity, and through this agency the aims of master and craftsman would be correlated. At present the Society, despite the number of distinguished architects among its members, appears to have little sympathy with modern building, judging from the experiments displayed. In fact, frank disavowal of the existence of historical sequence would have been better than an attempt to parody its lineage. Architecture in England has long been considered as a lost sister among the kindred arts, and on this score sadly in need of regeneration; but to insist that the culprit should don a species of strait-jacket is too brutal for consideration.

There is much in this Bazaar of the Arts eloquent of supreme endeavour and forceful purpose: a powerful colour sense allied to truthful construction, a creed strenuously pursued on the lines of freshness and vivacity; but these qualities lack force owing to an inappreciation of what constitutes elegance. The artists indulge in the pernicious idea that the present age is out of touch with graceful forms; moreover, that the conditions are so drastic as to militate against elegance. This is one of the chief evils to be combated, for if the depths of precedent are plumbed sufficient material will be found on which to formulate a distinctive policy. Mention can be made at this point of the tail-piece at the end of the Catalogue, in which the artist has very aptly, perhaps subconsciously, epitomised the present exhibition. The design is in the form of a circle, the subject allegorical. Craft is represented as a frail coracle at the mercy of a rough sea. A sturdy boy, in whom we recognise the lineaments of art, weighs down the small bark and bends aloft a sail which is subjected to puffs from the cherubs of Pottery, Glass, Painting, Architecture, Sculpture, Metal Work and Design. Is it intentional that the voyager has no rudder to steer his course, and must perforce depend on the seven cherubs for direction?

The visitor approaches the exhibition through the turnstile at the head of the main staircase, and is confronted with a panorama of what Trafalgar Square might be, but it is more likely that he will form a better estimate of the buildings as they now stand, in spite of the joint failures of William Wilkins and Sir Charles Barry. Further evidence of the Society's attitude to architecture is encountered in the main gallery and also the circular council chamber fitted up with devotional altars. The first gallery, or Retrospective Room, is given up to the early history of the movement. Here are displayed the exhibits of William Morris & Co. On the left is the enormous Burne-Jones painting "The Passing of Arthur," a subject rich in poetic fancy, and this artist's famous cartoon for tapestry "The Passing of Venus," from a drawing by H. Dearle, the original tapestry having been destroyed by fire at Brussels a few years ago. A further gallery displays what are beyond dispute the most ambitious and convincing mural decorations ever attempted in England.

There is a frieze by Mr. Rothenstein showing the granting of degrees to famous men at a university, with a group of young men whose lives have been sacrificed to war, and who are ghostly participants at the ceremony. This frieze is fastidious in rendering, and in many respects owes much to Italian precedent; but the effect is harsh, and the treatment of the scenery inconsistent as a foil to the processional rhythm of the figures. The academic garb of the persons obscures the life-like portraiture, and the prevalent tone of black accentuates the monotony. These are defects capable of rectification which Mr. Rothenstein's experience will doubtless enable him

to overcome in future renderings. In describing the wall decoration by Mr. Augustus John a controversial subject is entered upon. As a realistic experiment it is a remarkable performance, being neither of the photographic nor idealistic variety. It is true to the life, almost brutally so, yet it is fresh in inspiration and cheerful in tone values. This product of Mr. John's fertile imagination opens up a new vista, particularly concerning the decoration of public buildings; but all cannot be enthusiastic over this particular subject, for hard realities are seldom palatable. The chief merit of the design inheres in the simplicity of the conception and its dissociation from the formula of the great easel pictures of the past decade or so. The picture is divided into three parts. In the centre a group of Irish peasant women stand against a background of sea and rock-girt islands; to the right there is a group of fishermen; and to the left the market-place of a small seaport, with figures grouped round a stall. This design is a subtle representation of commonplace life, a plain statement of facts as they exist to-day in out-of-the-way parts of the kingdom, particularly the west coast of Ireland and Cornwall.

In this design Mr. Augustus John has endeavoured to emulate the works of the early fresco painters, and has imparted to his subject the naïve interest permeating the straightforward decorations of Della Robbia, but the costumes and the attitude of the figures grouped in this frieze err on the side of being too natural, and conventional grace is lacking. The mural painting by Mr. Greiffenhagen belongs to a different system, and is more worthy of appreciation by those interested in architectural mural decoration. The same remarks do not apply to the fresco painting by Mr. Sims, which is contradictory in composition and full of ugly contrasts, especially in the pose of the upright female figure. One thing must be understood in regard to this section of the exhibition, and this is, decorative painting in England has hitherto never been attempted on such a scale, and although the specimens of the art now on view are far from satisfactory, they nevertheless initiate a departure full of promise. The architectural gallery contains other mural designs which are convincing but less ambitious; these are somewhat out of scale with the temporary structure, and in consequence cannot be judged at their proper value.

In this gallery there is a model of a Campo Santo or Pantheon which is totally opposed to all academic teaching. The design partakes of a quasi-Byzantine flavour, the plan suggesting reference to Santa Sophia and St. Mark's, but the conception is thin in quality, it is a design forced for the show, like some strange plant reared under artificial conditions. The designer has not been strong enough to produce suitable detail, and has had recourse to meaningless sculptural decoration, besides calling further attention to this weakness by introducing innumerable flagstaves to foil the chief factors of his building.

The Society would have added very greatly to the architectural interest of their exhibition if they had invited more architects to send in models of buildings of all classes. There should have been a section devoted to houses and cottages, another to churches, and yet another to civic architecture and town planning. The fact that such a collection of designs would have been in some degree retrospective would not have detracted from the purpose of the Society in the least, and it would have had the additional advantage of bringing modern architecture to the notice of the general public, who have very confused notions on the subject.

Apart from the purely architectural interest, some of the galleries have been subdivided into furnished rooms, such as bedrooms, nurseries, and music-rooms, and in this remarkable series a toy-room is prominent. In the furniture department Mr. Gimson is the presiding genius, and under his able direction workmanship and technique have been raised to a high standard, but the aspect of design is still where it was ten years ago. In outline nearly all the furniture smells of the lamp; the exhibits are intricate and complex in form, there is not the touch of dignity and rich simplicity which is the hallmark of the beautiful and the elegant. Style is made up of these abstract qualities, and when the craftsmen who work under Mr. Gimson are made aware of these elementary facts a revolution of ideas will take place. Sometimes Mr. Gimson is content to study traditional forms, and then his work rivals the old, but his personality is too strong to recognise the old masters of design as dangerous rivals, and he is too deeply imbued with Jack-o'-lantern individuality to appreciate the need for courtly behaviour. When an article of furniture smells of the lamp, and in its outline shows that too much thought has been given to its parts, it becomes self-conscious like an overdressed woman, and ceases to be attractive, a fault scarcely condoned by other manifest qualities. Hence it is that almost without exception the furniture, fire-irons, mirrors, clocks, and other appurtenances in the bazaar are devoid of that supreme quality of elegance which is never absent from the products of designers and craftsmen of preceding ages. To some extent, it is true, Mr. Gimson has been compelled to study historical motifs, and as far as construction and technique go his work excels old specimens of the art, which were generally made on the principle of outside show, but his theory of design is too personal and the result tedious. Once this narrowness of outlook is combated, the blind attempts to build up a system of design amounting to a new fashion for movables will be relegated to the limbo of things, for it is unreasonable to take for models the simple furniture and equipment of peasant life and stretch them to the limit of pompous and snobbish complexity. The uninitiated are readily snared by such methods, but the man of true taste will have nothing to do with the productions, and is forced to the storehouse of Mr. Quinney. Wardour

Street and Tottenham Court Road will long flourish, and the wary gentlemen of Bond Street will continue to strip old houses of their treasures, until the Arts and Crafts movement takes cognisance of what is required by the enlightened section of the public. The market is enormous, the number of prospective patrons illimitable, only the right description of goods is lacking. The exhibition itself furnishes one or two instances of the course of action outlined above; for example, the modern spinets and clavichords are models of what furniture design should be. Apart from the question whether such musical instruments are suitable for modern requirements, there are numbers of people interested in them and desirous of possessing one. The design of the case and stand of the large example is the best specimen of modern furniture design in the galleries. This article is related to the distinguished examples of the past even to the minutest details, yet it is impossible to quote any known example which could have been used as a model. The case is modern, the feeling, character and decoration are fresh, and in artistic handling the instrument is sympathetic to the best old work of similar stamp. The craftsmen who have worked under Mr. Gimson have no idea of the wealth of design existing in the larger European tradition; a visit to the Louvre would be profitable to them, for it would at least teach them the fallacy of relying on excessive inlaying for the embellishment of their wares.

In some respects the Society has already succeeded in influencing the design of ordinary articles; this is apart from the travesty of their designs by the manufacturers of Curtain Road and the merchants of a West Central thoroughfare. We have only to inspect the stalls arranged by the Design and Industries Association to appreciate this influence as it has reacted on the ordinary articles of commerce. Here the old-established ritual has been followed, particularly for stoneware, jam-pots and crockery. These articles are real and unaffected, a source of pure joy for the benefit of those who minister to domestic needs from the innermost recesses of dull kitchens.

Another feature of artistic production brought before the gaze of the British public for the first time, entirely owing to the war conditions, is the astonishing display of coloured print-stuffs from the looms of Mr. Sixsmith, the Lancashire manufacturer, which formerly were exported to the West African market to adorn the persons of native chiefs, who in exchange eagerly bartered nuts for oil production in Germany. Now this is no longer possible, English people will be enabled to purchase rare textiles of strong and vivid colouring, which they have been desiring for years, but which no manufacturer has had courage to place on the home market. The most inspiring booth in the bazaar is the toy-room for children, where stands an ornate revolving lectern surmounted by a carved Elizabethan ship. The shelves are full of cunningly wrought toys and delightful dolls. The walls and screens are painted with solicitation for the infantile

outlook. It is a diminutive world happily arranged for an innocent community. The artistic toys are inexpensive and rank as works of pure art. In this is seen a menace to the German toy trade, and it is to be hoped that the wholesale houses who place such things on the market will quickly avail themselves of the amazing talent of the artists responsible for this sensible departure. As previously explained, it is not the purpose of this review to rewrite Mr. Wilson's Catalogue, but it will be only fair to mention the names of some of the artists who have contributed to the success of the exhibition. Mr. and Mrs. A. H. Christie and Mr. F. W. Troup with Mr. and Mrs. Charles Macintosh are to the front; Mr. Stabler is unrivalled in his fascinating designs for metal work, and Mrs. Stabler's lead figures will be coveted by architects and clients possessing gardens, for they are symbolic in style and finished in execution. It is not too much to say that the present exhibition has afforded the general public a new opportunity, of which they will not be slow to take advantage, to cultivate the artists and craftsmen whose works are on show. It will be recognised that the policy of the Society tends too much towards the creation of a vogue. The artists have no definite idea of what is essential, they ignore the existence of the lower ranks of the people, and wish to ostracise the educated patron. The desire to encourage a middle-class clientèle who will purchase the goods without inquiry, and acclaim the labour of the artists without question, blinds the leaders of the movement to the larger issues, which include the enlistment to their council table of the princes of the manufacturing world, the abolition of the commercial traveller, and the production of sound wares suitable for every home and within the reach of reduced purses. Above all things, a clearing house for design should be established without delay.

Architecture in relation to Health and Welfare.

The Chadwick Public Lectures now in course of delivery include a series of three by Mr. Paul Waterhouse [F.] on "Architecture in relation to Health and Welfare." The lectures will be delivered at the Surveyors' Institution, Great George Street, Westminster, on Thursdays, 30th November, 7th December, and 14th December, at 5.15 p.m., and admission is free. Lecture I. deals with War and Architecture—some causes and effects; Lecture II. Peace and Architecture—the growth and overgrowth of towns; Lecture III. The London of the Future.

Greater London after the War.

Professor S. D. Adshead is delivering, in connection with the University of London, a course of six public lectures on the Town Planning of Greater London after the War. The lectures, illustrated by lantern slides, are delivered at University College, Gower Street, on Tuesdays, 7th, 14th, 21st, and 28th November, 5th and 12th December, at 5.30 p.m. Admission is free by tickets to be obtained from the Secretary, Mr. Walter W. Seton, D.Lit., University College, Gower Street.



9 CONDUIT STREET, LONDON, W., 11th November 1916.

CHRONICLE.

The R.I.B.A. Record of Honour: Thirty-sixth List.

Fallen in the War.

FRANCE, 2nd Lieut. ARTHUR ALDERSON [*Fellow*], Royal Engineers (formerly Canadian Army Medical Corps). Killed in action in France. Aged fifty-three.

LIVESAY, Lieut. GEORGE AUGUSTUS BLIGH [*Fellow*], South Wales Borderers. Killed in action, 29th May 1916. Aged forty-nine.

BRAITHWAITE, JAMES ELLIS [*Associate*], West Yorkshire Regiment. Wounded in action, and died in hospital in France. Aged thirty-six.

Private J. E. Braithwaite was the eldest son of Mr. W. S. Braithwaite, architect and surveyor, South Parade, Leeds. He was educated at the Leeds Boys' Modern School, served his articles with his father, studied at the Leeds School of Architecture, and was elected Associate of the Institute in 1906. He was a member of the Leeds Architectural Society, and served on its Council. Associated with his father in practice, he took an active part in the management of the office, and designed several important buildings. He took a deep interest in several political and social societies, and at the time of his death was treasurer of the Mill Hill Ward Liberal Association.

The Opening Meeting.

Considering the times, and the awkward hour of meeting, there was a remarkably good attendance at the Institute last Monday—the Fellows alone numbering over fifty. Among the military members was the President's son, Lt. Adjutant W. G. Newton [A.], who was badly wounded last September; at first, amputation of the arm was feared necessary, but that danger is past and he is now making satisfactory recovery. Captain Burns Dick, whose stirring Call to Arms and stimulating Addresses* to the Northern Architectural Association will be remembered, had come from the far North on forty-eight hours' leave specially to attend the Meeting and had to return to duty the same night. A deep note of sadness was struck at the opening of the proceedings when the long list of names was read of members who had fallen on the battlefield since the Institute last met. The names will be found recorded on the Minutes† and in previous issues of the JOURNAL.

* See JOURNAL R.I.B.A., 5th and 19th December 1914, 18th December 1915.

† Publication of these Minutes is deferred, owing to want of space.

The late Richard Phéné Spiers.

At the Meeting of the Institute last Monday, the Hon. Secretary, Mr. E. GUY DAWBER, having formally announced the death of Mr. R. Phéné Spiers, made the following remarks:

Of the merits and attainments of Mr. Phéné Spiers I need not speak in this room. His work and influence as Master of the Royal Academy Architectural School, his special gifts for research, his literary industry, his rare skill as a painter of architectural subjects, are known to us all. I would commend to your notice the very interesting memoir of Mr. Spiers, by Professor Lethaby, in the current issue of the *JOURNAL*, in which eloquent tribute is paid to his personality and genius. Mr. Spiers served on the Council of the Institute for fifteen years, was for twenty-two years a member of the Literature Committee, and for eleven years its Chairman. He was the author of numerous Papers in the Institute *TRANSACTIONS*, and a valued contributor to our debates. I beg to move the following Resolution:

That the Royal Institute of British Architects do record its high estimate of the valuable and productive labours of its late distinguished Fellow, Richard Phéné Spiers, for the advancement of architecture, and its grateful appreciation of his eminent services as a Member of Council and of the Literature Standing Committee; and that the Institute do record its sense of sorrow at his loss, and do offer to his near relatives its sympathy and condolence with them in their bereavement.

Professor BERESFORD PITE [F.], in seconding the motion, said:—Mr. Spiers was in a personal relationship to very many members of the profession; at the Royal Academy Schools generations of us knew his personality very well. And even though it may seem strange to say so, in the somewhat remote days when I sat there, Mr. Spiers seemed to belong to a past tradition, that of the old Central European school of architectural thought and culture. The skies have changed, the horizon is altered, and the school which Mr. Spiers then represented is practically again the dominant school of architectural thought. The fact is that Mr. Spiers' scholarship and learning, his taste and abilities as an architect, partook of the permanent, rather than of the ephemeral qualities of architectural studentship; and it is to be lamented, I think, that he has left no important public building to commemorate a memory which is certainly a very important and dear one to those who knew him. Of Mr. Spiers' ability as an architect I think those of us who knew him well have no doubt at all. The fact that he was able to preserve a clear judgment through the stormy period of the Gothic revival, and to maintain his seat in the Royal Academy School when the atmosphere was certainly very strange to his school of thought, is, of course, a testimony to the value of his character. But if I recall to the members of the Institute the remarkable design he submitted, in the heyday of the revival, of the Church of the Sacré Cœur, Montmartre, Paris, in conjunction with Mr. C. J. Phipps, we shall recall a design which would do credit to the most modern school of French thought in our present English period, for the sphere has altered, and the design which Mr. Spiers made, forty years ago now, would be almost fashionable to-day. I think we should also bear testimony to his self-sacrifice. Some few years ago, when a testimonial was presented to him on behalf of his former student friends, he devoted the bulk of it to the founding of that very important collection of architectural drawings at South Kensington known as

the Spiers Collection, and which will do something to hand down his work.

And there is another element of his character, and a somewhat important one, and that is that he was a very influential medium between the profession at home and architects abroad. There was something in Spiers which always attracted the attention of the foreigner; and one has known of foreigners who have come to architectural conferences in England for the special purpose of meeting Spiers, just as on a like occasion they came to see Walter Crane. We have lost a very important channel of communication with the profession on the Continent in losing Spiers, and I am sure our colleagues abroad will share the condolence which we are expressing to his relatives. We had hoped that some recognition of his great services to the Royal Academy would have been bestowed upon him. Also we hoped that he would have lived to receive, shortly, some further recognition from this Royal Institute of the great work he did for the profession, both at the Royal Academy and here, through a long generation.

Lieut. Grissell's Bequest to the Institute.

Intimation has been received from Mr. F. de la Garde Grissell, sole executor, that the late 2nd Lieut. Francis Grissell, *Associate*, has bequeathed to the Institute a sum of £500 free of duty and expressed the wish that it be applied for the benefit of the Library. The late officer, who fell in the fighting on the Somme on the 15th September, was a pupil of Messrs. Nicholson & Corlette and was elected an Associate of the Institute in 1913. After his election he accepted an engagement in Hong Kong for a term of three years. Early in 1915 he returned to England and enlisted in the Artists' Rifles, subsequently receiving a commission in the Coldstream Guards. His portrait was published in the last issue of the *JOURNAL*.

Designs by George Edmund Street, R.A.

The President, in bringing the proceedings to a close last Monday, called the attention of members to the interesting exhibit on the walls of the meeting-room of competition drawings and designs and working drawings of ecclesiastical buildings carried out by the late George Edmund Street, R.A. They represent a selection from a numerous collection of drawings of the architect's works which have been presented to the Institute by his son, Mr. Arthur Edmund Street [F.]. On the motion of the President it was Resolved that an expression of the Institute's grateful appreciation of this interesting and valuable gift be entered on the Minutes and communicated to Mr. Street.

The drawings will be on view for some weeks.

Charing Cross Improvement Scheme.

The third and concluding article by Mr. John Burns, Sir Aston Webb, and Mr. Reginald Blomfield on the Charing Cross Improvement Scheme appeared in the *Observer* of the 22nd October.

The writers suggest that the right solution is to shift the bridge and its approaches farther east. The line of the new road-bridge and its approach from the Surrey side would start from a circle or "round-point" at the junction of the Waterloo with the York Road, and would be carried in a perfectly straight line from that point to the centre of the tower of St. Martin's-in-the-Fields. This gives a total length of 3,300 feet from the centre of the "round-point" to the point at which the axis line intersects the wall of St. Martin's churchyard, a length amply sufficient for the sug-

gested width of the new bridge, about 120 feet. At the intersection of the roadway with the West Strand a "place" might be formed, and by shifting the Charing Cross monument a few feet to the south this would also be on the axis line.

On the Surrey side the area to the south (or Lambeth) side of the new approach to the bridge would be assigned to the Company for their new station, leaving plenty of room for this and for a large "place" on the north side of the new station, occupying the triangular square formed by the existing buildings on the north-east side of Waterloo Road, and the façade of the new South-Eastern Railway station. It would be possible to get a site here for the station and hotel at least four times as big as the present Charing Cross site, with, of course, extension of the line of entry for the rails, and without interfering with important traffic roads. The site could indeed be extended south just as far as necessary.

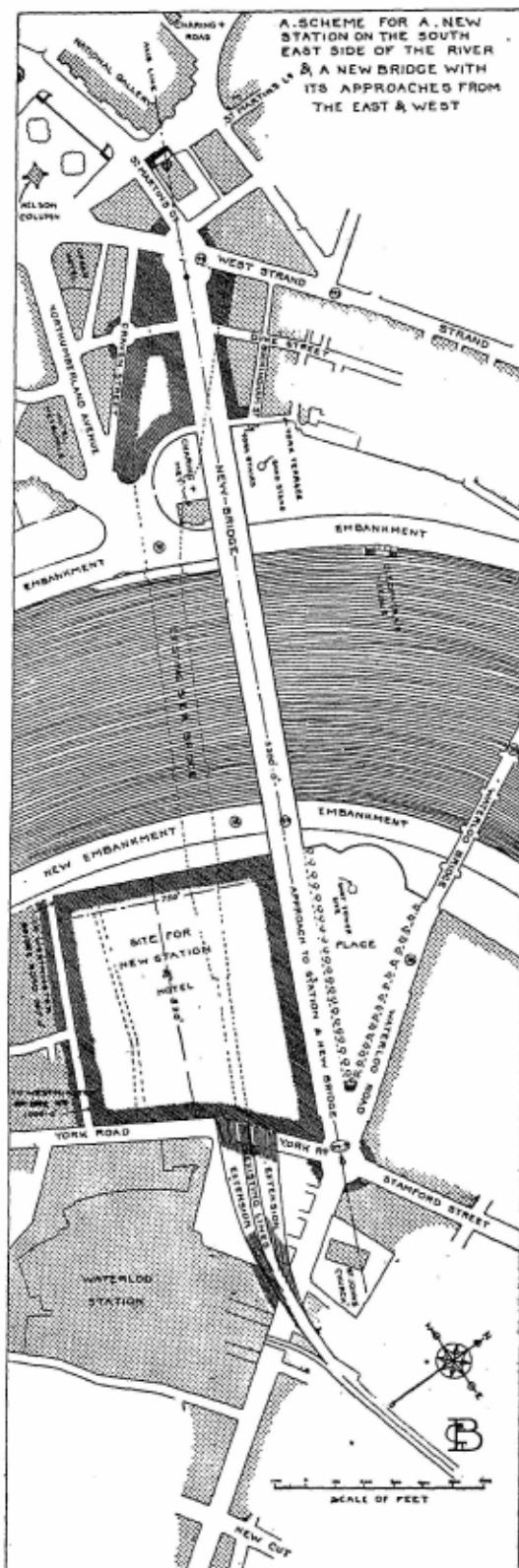
The area proposed to be taken over is occupied by unimportant buildings, owned for the most part by public bodies, and an opportunity would be given of dealing at the same time with the south approach to Waterloo Bridge by means of a triangular "place" about 600 feet wide at the base next the river, and something over a thousand feet from the river end to the centre of the "round-point" in the Waterloo Road. Ultimately the foreshore, now a mud flat at low tide, should be reclaimed and laid out as an embankment and garden at a lower level, as on the opposite side of the river. On the west side the scheme would leave the larger part of the ground now occupied by the station and its approaches free for development, and would do away with that shabby little lane, Villiers Street.

Lastly—and it is not the least important consideration—the new roadway would not interfere with the railway bridge, and would leave the Company free to build their new station and rearrange their traffic with a minimum of inconvenience. The new bridge, being a high level bridge, would avoid all difficulties of navigation, levels and gradients, would leave free access from Northumberland Avenue to the Embankment as at present, and would avoid any interference with the existing tramlines.

As regards the question of finance, the writers point out that, if the new bridge is not built the only means of relieving the traffic will be to double Waterloo Bridge, which is barely 50 feet wide out to out. The effect of this aesthetically on the bridge is doubtful, but the point is that the very considerable cost of this should, if saved, be reckoned to the credit of the new bridge.

In the second place, it is obvious that the Company can acquire the larger site necessary on the south side for the price that will have to be paid for the existing site on the north side. This being so, it leaves to be found the cost of the new bridge and its approaches and the new station and its approaches, with incidental expenses. London, with the assistance of Imperial resources and possibly of private generosity, should find that cost small compared with the practical and aesthetic gains, and it is believed that when the London County Council takes up the matter as it has promised to do there will be no insuperable obstacles in the way of its being carried out after the war.

On some such lines as these the writers urge that an unrivalled opportunity presents itself of carrying out a far-reaching improvement in the civic architecture of London, a scheme of very real benefit to the public, and a superb national memorial of the war.



CHARING CROSS IMPROVEMENT SCHEME, suggested for consideration by Mr. JOHN BURNS, SIR ASTON WEBB, and Mr. REGINALD BLOMFIELD.

Mr. H. Cosmo Bonsor, Chairman of the Managing Committee, Chatham and South-Eastern Railway, in a letter to the Press, states that the strengthening of the Charing Cross Bridge is an urgent and pressing necessity, and the Company cannot take the responsibility of risking the safety of the public by delay. They have, therefore, no alternative but to reintroduce the Bill in the present Session of Parliament to give them the necessary powers to spend the comparatively small sum of £170,000 in strengthening the bridge. He goes on to say that the large and ambitious scheme of improvement proposed by people absorbed in aesthetic and artistic ideas would take twenty to twenty-five years to carry out and would cost many millions. The spending of the £170,000 is negligible compared with such expenditure and can have no effect on the ultimate carrying out of any scheme which might be decided on.

Australian Federal Parliament House Competition :

A letter to the President from the Office of the High Commissioner of Australia, dated 27th October, states that a cablegram has been received from the Department of Home Affairs, Melbourne, to the effect that the date up to which designs for this competition may be received has been extended from 31st January to 30th April, 1917.

The President has sent the following reply to the letter from the Office of the High Commissioner published in the last issue of the JOURNAL [p. 323] :—

9th October 1916.

*The Official Secretary, High Commissioner's Offices,
72 Victoria Street, Westminster.*

SIR,—The Royal Institute of British Architects begs to acknowledge the receipt of your communication of the 18th September citing the cablegram received from the Commonwealth Government.

The Royal Institute fears that it did not make sufficiently clear the very serious objections which in its opinion exist against the resumption of the competition during the War. Owing to the fact that all the architects of Great Britain and the Allied Nations who are of military age, and large numbers also of the architects of Australia, Canada, and New Zealand, are now serving with the Forces, they would be shut out from any chance of competing. A competition in these circumstances would be practically confined to neutral countries and would be in no sense international, as advertised in the original conditions.

The Royal Institute feels very strongly that if the competition is resumed now the architects of neutral countries would have a preponderating advantage over those of the Empire and its Allies, and no real opportunity would be given to Australian architects, the architects of the Dominions, or those of the Mother Country and the Allies, who are taking their part in the great War. Apart from this grave objection on patriotic grounds, the narrowing of the area would obviously greatly minimise the chances of securing the best result.

The Royal Institute feels that the serious objections to which it has ventured to call your attention far outweigh the one advantage of finding employment on this particular building immediately after the War.

I am, Sir, your obedient Servant,
ERNEST NEWTON, *President R.I.B.A.*

Sir John Burnet has sent the following correspondence for publication :—

*Department of Home Affairs, Melbourne.
9th August 1916.*

Sir John J. Burnet, LL.D., R.S.A.

SIR,—Resumption of this competition to select an architect for the Parliament House was announced by the

Australian Government, 2nd August 1916, and has been communicated to the one hundred and fourteen previously registered competitors and published generally.

The conditions are exactly as when first published 30th June 1914, per programme enclosed, except that enemy subjects will be ineligible, and that the date for receiving designs has been extended from 31st March 1915 to 31st January 1917, leaving the period for completion equal to that when postponed 25th September 1914.

I sincerely trust that nothing will prevent your honoring, in conjunction with the remaining selected architects from friendly countries, the Government's reconsideration of a previous letter dated 16th November 1914, and now accept as a most urgent requirement its official renewal of your appointment dated 25th June 1914 to act as adjudicator. The reappointment is being forwarded, and comprehends the same arrangements as previously entered upon, and the date of your meeting at London should accordingly be about March next.

I feel keenly that the Commonwealth's duty towards those of the profession who entered upon the work of the competition is to keep faith in every respect possible, and that, of course, implies retaining the highest standard of adjudication upon which they were induced to enter and, in many cases, to do a great amount of work.

Professor Wagner being unavailable, his successor has, in accordance with Condition 2.26, been nominated in the person of the Russian, Eliol Saarinen, of whose international standing naturally you do not need to be informed, and of whom you may recall among his score of competitive honours the second prize for the Australian Federal Capital City.—Yours truly,

(Sgd.) WALTER B. GRIFFIN,
Federal Capital Director of Design and Construction.

*Department of Home Affairs, Melbourne.
15th August 1916.*

Sir John J. Burnet, LL.D., R.S.A.—

DEAR SIR,—Following my cablegram to-day, acquainting you of the decision of the Commonwealth Government to resume the Federal Parliament House Architectural Competition, I desire to reaffirm your appointment as adjudicator in accordance with Mr. Kelly's letter to you of 25th June 1914 (copy herewith).

I find from the papers left by my predecessor in office that in connection with the postponement of the competition that gentleman took the step of cancelling the arrangement with you. Such action is to be regretted, and the letter addressed to you in this connection is withdrawn. This Government is fully appreciative of the prestige which your support has already given to the competition and of the advantages to be derived from your continued association with the project.

With regard to the meeting of the adjudicators in London, it is now proposed that this should take place in March 1917.

I may add that, it being necessary to appoint a new adjudicator in place of Professor Otto Wagner, the nomination made by the Federal Capital Director of Designs and Construction will be communicated to you as early as practicable.—Yours faithfully,

(Sgd.) KING O'MALLEY,
Minister for Home Affairs.

6th October 1916.

Walter B. Griffin, Esq.,

DEAR SIR,—I am favoured with your letter of the 9th August in which you confirm the intimation, cabled to me by the Minister of Home Affairs on the 15th August,

of the resumption of the Federal Parliament House Competition announced by the Australian Government on the 13th June 1914; and you express the hope that I may be willing again to accept the position of one of the adjudicators to which I was then appointed, but which was cancelled by Mr. Archibald's letter of 16th November 1914, in which he intimated that the competition had been "indefinitely postponed" on account of the outbreak of war.

I gather from your letter that only 114 applicants were registered competitors in 1914, and that you are resuming the competition on that basis?

In the list of towns which are named in the "Conditions of Competition" (page 1) as the source of distribution of "conditions," one is German, one Austrian, four are British, one is Italian, one French, one Russian, one Spanish, one Swedish, and one American. As the German and Austrian have been deleted, only three belong to neutral countries, and the others are still at war. Before definitely accepting the appointment, I would like to know: (1) the different nationalities of the competitors originally registered; (2) the number of each nationality, and (3) whether you have any reason to believe that those registered from the British Empire, from Italy, France, Russia, and elsewhere, are likely now to be able to submit designs.

Here in any case our manhood up to forty years of age is engaged in military service, and many above that age are engaged in various branches of home service, and I understand that Australia has recently accepted "conscription" or its equivalent. It seems to me, therefore, that the chances of an international competition are remote.

As the two French Societies of Architecture have intimated to the R.I.B.A. that they do not desire to enter into competition during the war, I am communicating with Mons. Victor Laloux, my proposed French colleague on the Jury.

It seems regrettable that you did not consult with the adjudicators before determining to resume the competition and as the result published my name as adjudicator before getting my adhesion.

Awaiting your reply, I am, dear Sir, yours faithfully,

JOHN J. BURNET.

P.S.—Meantime I have cabled the Minister for Home Affairs as follows:—

"Letter received, have written. Kindly withdraw my name as Assessor pending your reply.—BURNET."

6th October 1916.

The Hon. King O'Malley,

DEAR SIR,—I have the honour to acknowledge your letter of the 15th August confirming your cablegram of the same date in which you intimate the decision of the Commonwealth Government to resume the Federal Parliament House Competition, and in which you very kindly express the desire to reaffirm my appointment as adjudicator in accordance with Mr. Kelly's letter to me of the 25th June. By the same post I received a letter from the Federal Capital Director of Design and Construction intimating the appointment of Mr. Eliel Saarinen in place of Mr. Otter Wagner, and giving details of the competition of which I was not aware. I enclose a copy of a letter I have addressed to the Director on the subject, and must await his reply before accepting the appointment which you so kindly offer.

I need not I hope assure you of my continued and keen interest in the great work you have before you, but you will, I think, readily appreciate that I cannot definitely

accept reappointment as a member of the Jury until I have some assurance that under present conditions the competition is really likely to be the international one originally intended, and until I know what my colleagues (now Allies) feel in the matter.

I have the honour to be, your obedient servant,

JOHN J. BURNET.

P.S.—I have cabled you as follows: "Letter received, have written. Kindly withdraw my name as Assessor pending your reply.—BURNET."

Sir Charles Barry's Compasses.

An interesting relic has been added to the Institute Collection by the presentation of a pair of compasses used by the architect of the Houses of Parliament, Sir Charles Barry, up to the date of his death in May 1860. Since that time they had been used by his son, the eminent engineer, Sir John Wolfe-Barry, K.C.B., F.R.S. [*Hon. A.*], by whom they were presented to the institute on 23rd March last.

CORRESPONDENCE.

Vaulting of Winchester Cathedral.

30th October 1916.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—In looking over my paper on "The Vaulting of Winchester Transept," just published in the JOURNAL, I regret to find that I have, with stupid inadvertence, misconstrued the perfectly plain language of what I quoted from my friend Mr. John Bilson on this vaulting. In saying that his remark on page 302 of his paper entitled "The Beginnings of Gothic Architecture" qualifies what he had said on page 301, I am in inexcusable error. His very true statement about the vault of the "northernmost bay of the east aisle of the north transept" does not in any way qualify what he had said about the vaulting of the "reconstructed bays." It merely gives important additional information, and shows that he had recognised the existence of the three forms of vaulting of which my paper treats—a fact which I ought more clearly to have brought out.—Yours very truly,

CHARLES H. MOORE [*Hon. A.*].

NOTICES.

Licentiates and the Fellowship.

The next Examination of Licentiates desiring to qualify for candidature as Fellows will take place in January, 1917. Applications for admission to the Examination must be sent in by the end of the current year. Full particulars may be had on application to the Secretary R.I.B.A.

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DESIGN FOR ST. MARY'S CATHEDRAL, EDINBURGH (GEORGE EDMUND STREET, R.A.)

SOME RECORDS OF THE WORK OF GEORGE EDMUND STREET, R.A.

By WALTER MILLARD [A.], *Pugin Student* 1879.

IT seems eminently meet and desirable that at the headquarters of British Architects there should be found records and relics, duly kept and enshrined, of past-masters in building-work, British especially, yet by no means exclusively British masters; and the more particularly appropriate does it seem if, in any given instance, we can here find something showing the man's own hand or the impress of his designing-power. Both of these are shown in the collection of designs and sketch-books by the late George Edmund Street, recently presented to the Institute by his son, Mr. Arthur Edmund Street [F.], a selection of designs from which is now displayed in the Meeting Room at Conduit Street.

It is surely a sign of good import that amongst members of the Institute there is being maintained so well a living interest in men and works of the past, in architects as personalities, and their architecture, both remote and near. Thanks to generous donors and to wise and far-seeing administrators in days gone by, our Library can count amongst its treasures not a few drawings and designs by architects of former generations; whilst additions to the collections have kept on being made from time to time. But of late there has come about almost a revival, one may say, of keen and special interest in the life-work of deceased masters, and particularly of certain architects whom we may reckon as our own immediate or near predecessors. In the past year alone at least 2,000 drawings by deceased architects, mostly not so very long deceased, have been presented, and are now being dealt with in the Library and being catalogued.

The drawings at present hung in the Meeting Room consist mainly of contract drawings of executed works, arranged in groups, approximately in chronological order, along one side wall and on the end walls. The remaining side wall is chiefly filled by a fine set of scale-drawings illustrating a work of no

slight importance, though one that was not carried into execution—viz., the virile design that Street submitted in competition for Edinburgh Cathedral. To this we will return.

Taking the executed designs in their order, we begin with Uppingham School Chapel, dated 1861–2. For architects a point of peculiar interest to note is that the name we read as witness to these signed contract-drawings is R. Norman Shaw, doubtless the actual draughtsman of the set. This chapel must be accounted an early example of its particular class of building; so many of our Public Schools, since its foundation, having provided themselves with such an adjunct, either entirely new built or rebuilt. This example appears to comprise, in compact form, the essentials of such a building, not forgetting a distinctive bell-turret. Already, in this earliest of the designs exhibited, may be noted leading characteristics that distinguished Street's work throughout his career. In the seating of the chapel a compromise is effected between the respective systems for school chapel seating, of the church nave and the college chapel type, by putting a single row of fixed-stalls facing north and south all along the side walls, with return-stalls at the west end, and then filling the middle area with ordinary seats facing east, leaving a central alley of ample width. A total span of 80 feet allows for all this.

The set of drawings, dated 1868–9, for Toddington Church, Gloucestershire, built for Lord Sudeley, comprises carefully prepared alternative studies for the tower and spire. This latter is planned not on the central-axis but alongside the easternmost bay of the nave, with its legs, so to speak, well out of the way. The inner wall-faces of the aisleless nave are treated as blank-arcades embracing windows, suggesting that aisles might come some day and the arcades be made open; and then, of course, the windows could be worked into the aisle walls. Herein we get a hint at an enlightening parallel, inverted, with the growth of many an old church. A special feature in connection with this church is a large, almost disproportionate, chapel on the north side, evidently to hold a central monument. This chapel, like the chancel, is vaulted and is fully lit by five three-light windows.

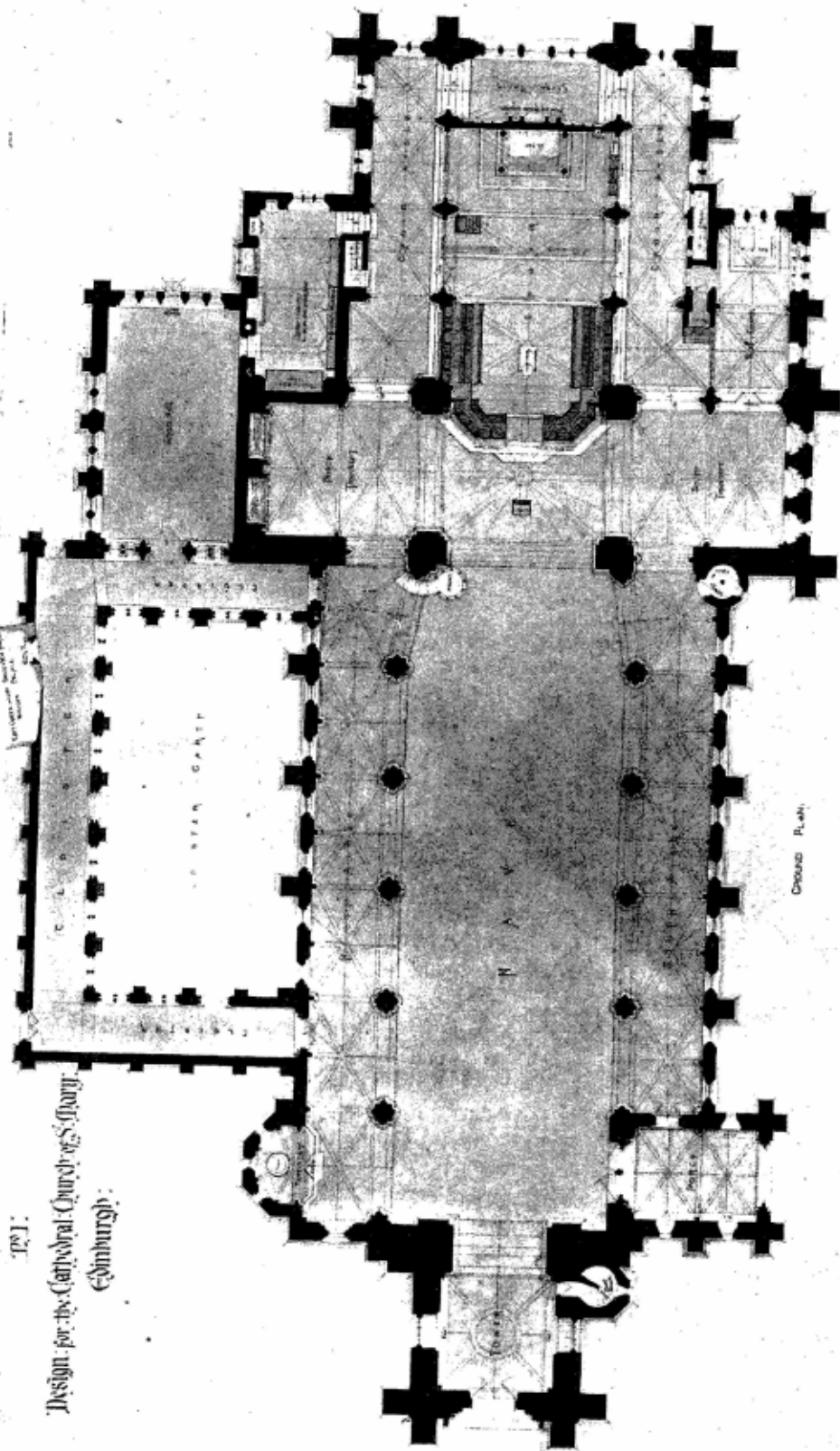
The largest of Street's London churches must be that of St. John the Divine, Kennington, of which we have here a fine set of drawings, dated 1871. This is a church with a nave of 35 feet span but without a clearstory, and consequently low-lit, that is, with light entering only at the ends and from side-aisle windows, whilst from the west it has to shine through windows away back in the tower. The result is a church low-proportioned and wide-spreading yet raised to great dignity externally by a noble steeple of commanding proportions. The considerable width of nave involves the canting of the arches of its easternmost bay to meet the narrower chancel, an expedient employed by the architect in other instances, at St. Saviour's, Eastbourne, for example. The apsidal-ended chancel, and the south chapel alongside, are vaulted in brick, the nave and aisles being wooden-roofed. Pencil marks on the ground plan indicate that after the contract was signed a solution was called for of the problem of the return of communicants from the altar rail, by side exits. Two half-inch scale detail-sheets explain the general design of nave and chancel, including roofing and vaulting. Here is a church planned to seat a thousand persons, provided with its side chapel, baptistery, porch, organ-gallery and double vestries.

This church and that of St. Agnes, Kennington Park, by Gilbert Scott the younger, are neighbours and almost contemporaries. To compare these works, by two masters, point by point, is to go through a little educational course in church architecture. Conveniently situated as these two examples are for this purpose, their comparison might be still further facilitated, now that we have the drawings of one, if drawings of the other also could by any means be acquired for the Library.

The church at East Heslerton, on the Yorkshire Wolds, built for Sir Tatton Sykes, is shown in drawings dated 1873. It is a little country church, one of Street's many small works on which he would imprint his personal touch just as firmly and surely as on larger works by his hand. Like the last example, this has a vaulted chancel apsidal-ended. The seating accommodation is limited, but as a church the building is very complete with its sacristy, organ-recess, baptistery, western narthex and spired tower north of the nave. This set of small-scale drawings is supplemented by two detail-sheets of the subject illustrating respectively the blocks of choir-seating and the stone-roofed lychgate with

Fig. 1.

Design for the Cathedral Church of St. Mary,
Edinburgh.

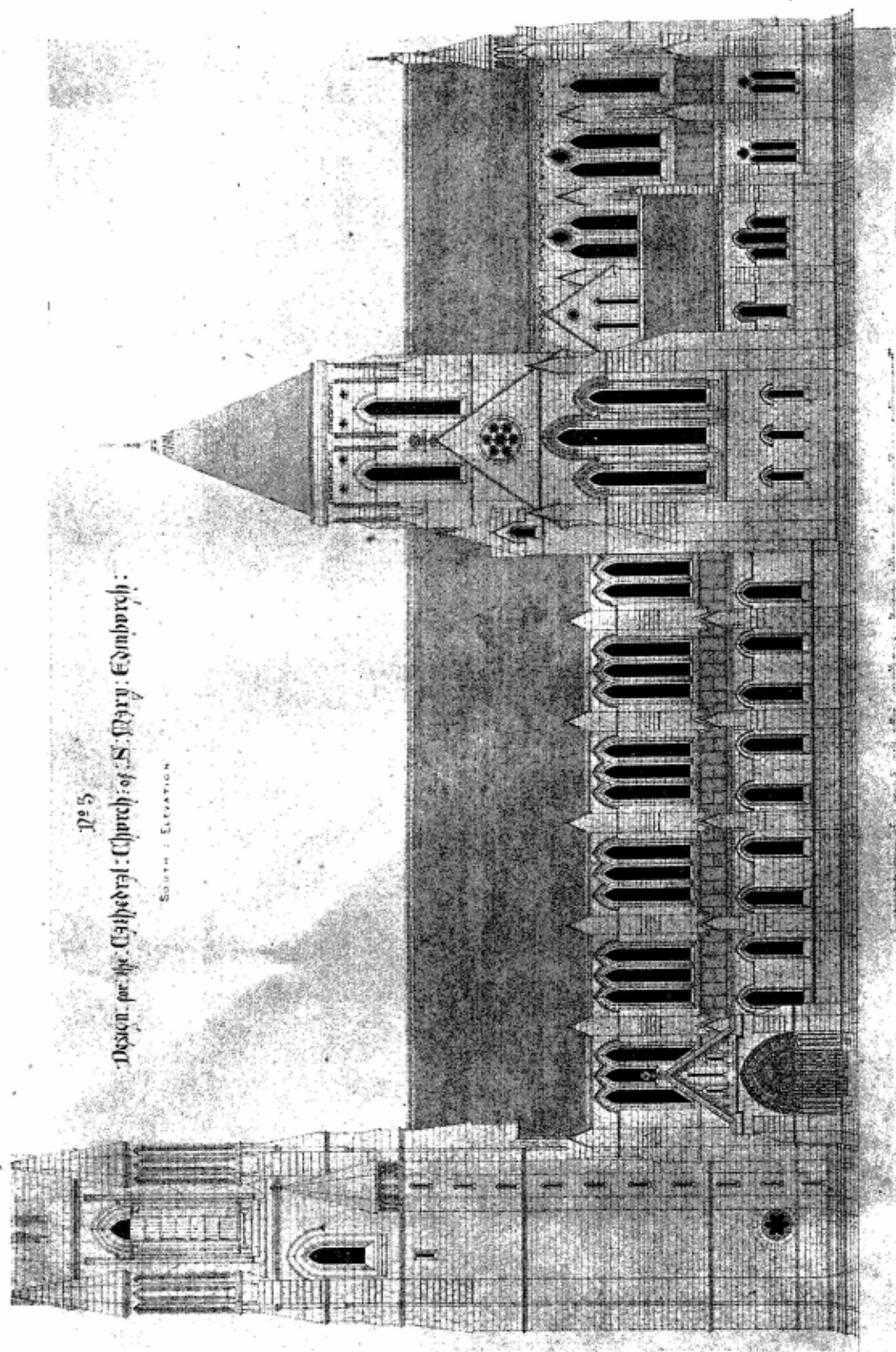


Ground Plan.

No 5

Design for the Cathedral Church of St. Mary, Edinburgh:

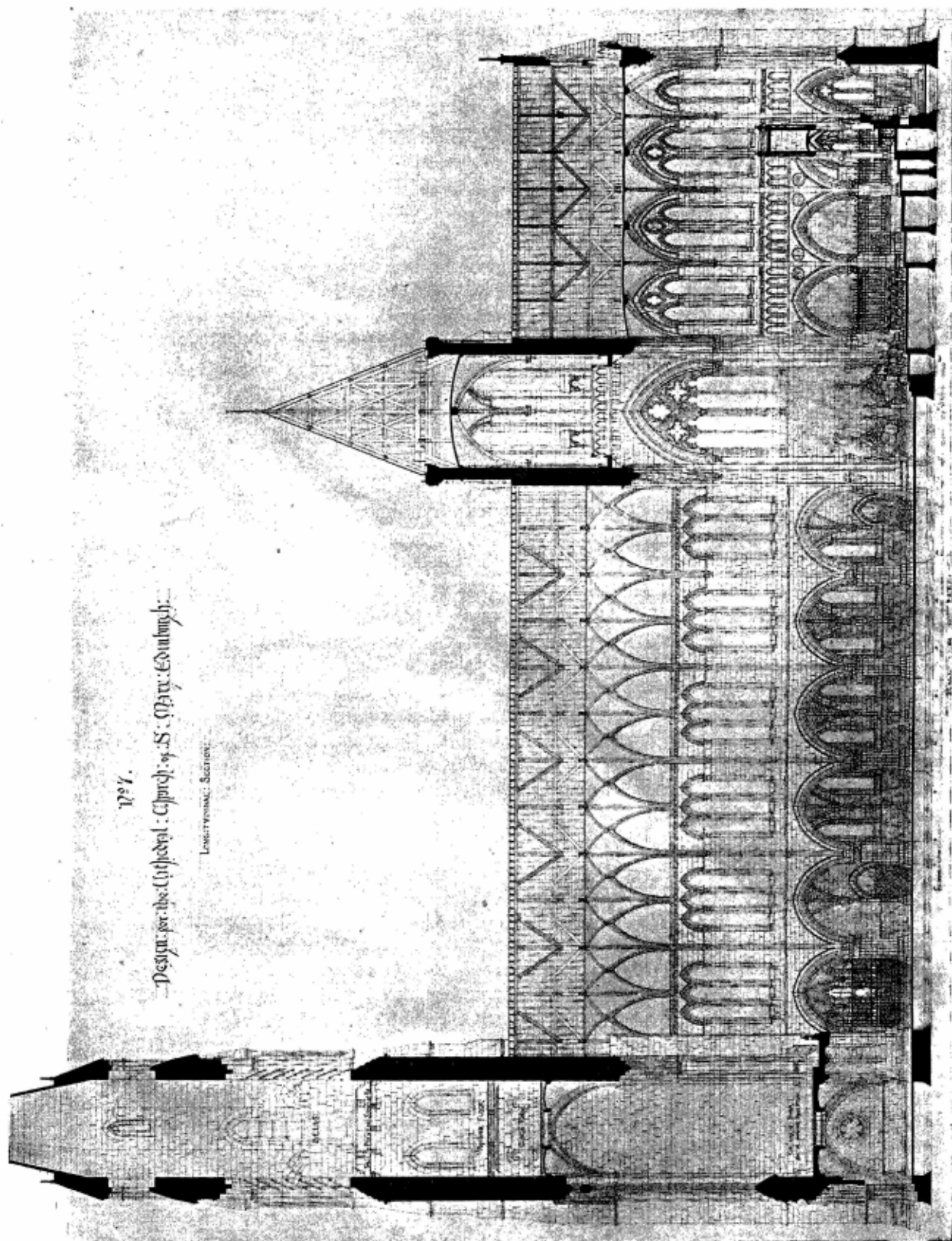
SOUTH ELEVATION



1797.

Design for the Cathedral: Church of St. Mary, Edinburgh.

LONGITUDINAL SECTION.



churchyard wall, as well as a tall churchyard cross set up on its circular flight of three concentric steps.

A fair specimen of a church by Street is presented in the set of drawings for All Saints', Middlesbrough, dated 1874. Here a compact and well-composed mass of building is appropriately emphasised by a tower, forming a north porch, that looks right, in shape, size and position. A short, and rather low, chancel involves the bringing forward of the choir-seating partly into the easternmost bay of the nave, with good effect, the organ being raised up in a shallow transept north of this bay. This is a design that gives the impression of aiming at accomplishing something rather too complete for the means available.

The drawings for the chapel of St. Margaret's Convent, East Grinstead, are dated 1878, but the other buildings of the establishment had been erected some years before that. This chapel consists of a wide nave, wooden-roofed, and a columned and vaulted chancel, an arrangement recalling the church at Gerona, so well shown in the architect's *Gothic Architecture in Spain*. A low eastward-extension, in the form of a Lady chapel, aisled and vaulted, forms a marked feature in the building. A great advance is evident in this chapel upon the earlier one for Uppingham School, and to make out the comparison is perhaps not altogether unprofitable. Like the Uppingham example, of the same span, the nave of this chapel is seated with fixed side-wall and return-stalls and with ordinary seating in the general area. As at Uppingham again, a rose window figures, closing the vista, here to the east, there to the west. Here, at East Grinstead, the planning of the approaches from and the connection with the adjacent buildings is worthy of notice. One detail-sheet contains various mouldings drawn to full-size. These Street would pencil-out with his own hand, and although they are now mostly put into ink and colour, somehow there yet remain on this sheet a few details still in pencil, just as he drew them.

One of the architect's happiest efforts was the American Church of St. Paul, at Rome, the campanile of which is here represented, dated 1874. As the designer clearly intended, this piece of building-work takes its place naturally amongst the goodly company of brick campanili in Rome, a series dating from early mediæval days onwards. As an instance of doing at Rome as Rome does it fully justifies the procedure. This was one of those cases in which Street displayed to advantage his mastery in building outside his own generally recognised domain in architectural form. Half the west front of the church is shown in connection with the campanile that flanks it, and once more a rose window plays an important part in the composition. The campanile itself rises clear of the rest of the church, in stages pierced by openings increasing in size the higher their level. Two sheets of detail-drawings give the working-out of the design.

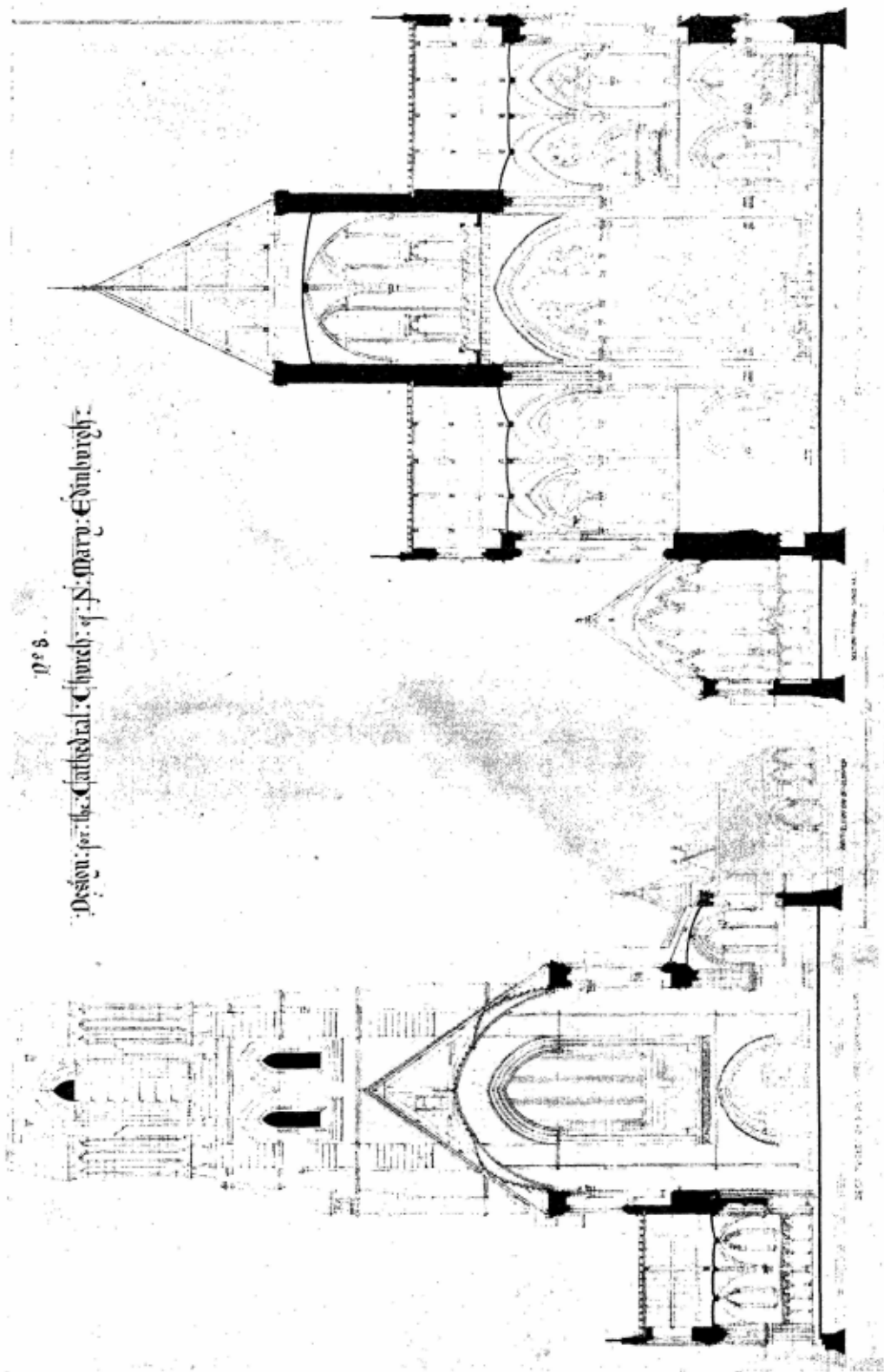
Another instance of Street's ability and will to adapt his powers to a special case is to be found in the Guards' Chapel, Birdcage Walk, Westminster, where, as the working-drawings, dated 1876, show, a complete transformation was wrought. A rectangular meeting-house, presenting itself to the outer world in the guise of a Doric temple, has been converted internally into a three-span barrel-vaulted church ending to the east in an apse with semi-dome complete, all adorned by marbles and mosaic in accordance with the architectural expression of the structure. In the execution of this work a wheel window got pierced in the west wall, under the Doric portico, to supply some extra and much-needed light. The choir-seating, in Italian walnut inlaid, and the marble screen-work, pulpit, and font are shown on three detail-drawings. Much of the work here takes the form of military memorials.

The drawing shown for the Bishop's throne at Carlisle, dated 1879, illustrates the executed one of the three distinct designs that were made by Street for this work—an unusual number of alternative schemes for him to prepare for one subject. To read this design fairly one needs the full-size mouldings and details that would be given to Messrs. Rattee & Kett for the execution of the work.

Over the Edinburgh Cathedral competition Street seems to have put forth his full strength. And as much, no doubt, might be said of two at least of his competitors, viz., Wm. Burges and Sir Gilbert Scott, the latter of whom won the competition and carried out the work. It was indeed a notable con-

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Design for the Cathedral Church of St. Mary, Edinburgh.



test. These three were old antagonists, Street having not so very long before worsted the two others in the Law Courts competition. At Edinburgh he fought under the motto, "In hoc Signo"; whilst Burges, making play, after his wont, upon his own name, proclaimed himself a burgess of no mean city—"non ignotæ civitatis municeps."

Street's design is, in some respects, all the finer perhaps, and certainly the more closely thought out, by reason of severe restraint imposed by the limit set to the proposed expenditure on this building. However, by that time the architect had been through the school of economy as conducted so often by building promoters trying to obtain the fulfilment of their requirements at a price based on a valuation mainly of their own making. He rose to the occasion with this design for a central-towered church having transeptal arms and a square-ended eastern limb. The wide nave, 38 feet in span, of great dignity and fully lit by a tall clearstory, has its easternmost bay planned as we have noted that at St. John the Divine, Kennington, to taper slightly inwards on plan, thus meeting the western arch of the narrower central-lantern. A single western tower on the central-axis might be said to recall the arrangement at Ely but for the necessary omission here of the flanking-masses that went to the making of the Ely façade.

To follow out this design through plan, section, and elevation is quite an invigorating exercise in the art of reading a structure from drawings, and certainly in this case an exercise that no student of architecture could go through without benefit. For a cathedral the whole thing is, to be sure, on rather a modest scale, yet for its size it is a work of much distinction, the central lantern itself, in combination with the big western tower, serving to mark the building as one of the greater-churches.

A half-inch scale detail-drawing throws light on the architect's intentions as to the internal architecture, the organ-front, sculpture and stained-glass.

This collection is, of course, but a handful picked out from the mass of work that Street produced during his career as a practising architect. In fact, it can hardly be claimed to be truly representative of his output. In a collection that might be so designated, one would certainly look for many another subject besides these shown. Just to name a few at random, let us mention, amongst new churches on an important scale: All Saints, Clifton; St. Saviour's, Eastbourne; St. Mary Magdalene, Paddington; the Crimean Memorial Church at Constantinople; the English Church in Rome, as well as the American Church there; and the American Church in Paris; whilst of the number of smaller churches by his hand we might be content to take as representatives the church at Kingstone, Dorset, for the Earl of Eldon, and that of Holmbury St. Mary, Surrey, built at the architect's own expense in his own parish. This would still leave out of account the host of old churches that came under his hand, from Bristol Cathedral and Christ Church Cathedral, Dublin, down to quite small village churches and chapels. But with all the above represented our collection might yet lack examples of the secular and domestic work that he carried out and, above all, his chief work, the Law Courts, for which alone he prepared some 3,000 drawings with his own hand. A representative collection would necessarily comprise examples of all the above-mentioned groups. Yet our foundation of such a collection is well and truly laid by the presentation of the drawings above noticed, supplemented by several precious sketch-books. These sketch-books call for a separate notice.



THE RUINED PROVINCES OF FRANCE AND THE SOCIÉTÉ DES ARCHITECTES-DIPLÔMÉS.

By JOHN W. SIMPSON [F.].

"etiam pcriere ruinae"

NO calling in this country has suffered more from the War than that of art, nor has any branch of art been so shrewdly hit as architecture. The painter and the sculptor are at the least free to carry on their works, if so be they can find patrons who desire them. The architect is forbidden to give effect to his client's commission; he may not exercise the delicate skill which so quickly rusts for want of use, but must learn another trade for his living. All that remains of the practice he owned in former years is the income-tax which is computed on its vanished earnings. Yet, the profession has a war record of which it may be proud. Our young men sprang to arms at the first call of the bugle, few waiting for compulsion; others of us, past the age of active service, have filled the ranks of the Reserves, the Constabulary, and the Volunteers; while the ancients "carry on," and keep things together as best they may, against the return of those whom wounds and death shall have spared.

The Government has not seen fit to make use of us in our corporate capacity. The splendid organisation of the Royal Institute, governing, at a rough guess, some 5,000 members—men trained from their youth upward in the supervision of contracts and the control of complex accounts—has, for war purposes, been absolutely wasted, and with it an appalling proportion of the national resources. It is poor consolation that some one, years hence, may be called upon to explain why—for example—works of stupendous extent were placed direct in the hands of contractors, with leave to calculate their profits on the fantastic basis of percentage upon unrestricted cost. Though the steed has been stolen, there will be no stable door to shut; the whole building has disappeared, and its place is covered by huts filled with innumerable clerks.

The architects of Great Britain have done what they could. They have not been allowed to do all that, with profit to the nation, they would very thankfully have done.

* * * * *

In France, they are more fortunate in their occasions, and our brethren of the Société des Architectes-Diplômés invite us to join them in an important undertaking, approved and supported by their Ministers of Beaux-Arts and of Agriculture.

The communication addressed by the Société to the President of the Royal Institute fully confirms the suspicions some of us already entertained, that our common enemy is attempting—under cover of more or less genuine neutral or "international" societies, of which those specially interested in town-planning should beware—to obtain a share in rebuilding the towns and villages which they have themselves destroyed. French architects, with the admirable backing of their Government, are determined to bring this impious enterprise to naught; we shall all applaud their efforts, and support them "tooth and nail." Commercial interests are, it appears, putting forward insidious proposals for the standardisation of reconstruction, at any rate as regards the occupied North-Eastern districts of France, with which the S.A.D.G. is, naturally, concerned. Those who have seen the hideous aspect of those once exquisite towns, Messina and Reggio, and who realise the difficulty of extirpating "standard" structures, when once erected, will spare no pains to resist the exploitation of the devastated provinces of France by firms of contractors, whether masquerading as neutral, Swiss, American, or other Societies of any kind, or not. To inflict upon the stricken country the soul-destroying monotony of such buildings; to replace the picturesque individuality of her villages by houses cast to a "type," would be to stamp France for all time with the mark of the German beast.

I need not dwell on this point. The sympathy of every reader will support the resolve of the Architectes-Diplômés to prevent this degradation of their beloved land.

The procedure by which they propose to achieve their object comprises two measures, in logical sequence. First, an *Exhibition*, of Drawings and other documents illustrating the essential local features and conditions of the several provinces ruined by the war. Second, a *Competition*, of designs for domestic buildings, based upon a careful study of the conditions and requirements disclosed in the information collected by the Exhibition. The particulars of this competition are not yet communicated; but it is intended that the premiated designs shall be reproduced in large numbers, distributed to the *mairie* of every *commune*, and placed, in consideration of a nominal royalty, at the disposal of all who wish to build from them. This, without involving any liability on the part of the users, either to their authors or to the Société des Architectes-Diplômés—An entirely generous and patriotic project.

It is with regard to the Exhibition that our co-operation is, for the moment, invited. This will be grouped under the following territorial headings:—

- (1) LE NORD—Picardie, Artois, Flandre.
- (2) LA CHAMPAGNE—Champagne pouilleuse, Champagne humide, Ardennes (massif schisteux rhénan).
- (3) LA LORRAINE—Meuse, Meurthe et Moselle.
- (4) L'ALSACE.
- (5) LE VALOIS—I'ÎLE DE FRANCE.*

It is the object of the Société to show, as clearly as possible, how the architectural traditions of the respective localities have been formed from constructional methods imposed by climate, subsoil, and other physical conditions, and modified by local needs and customs. These traditions of design find their expression not only in the country house, but in town residences, hôtels-de-ville, fountains, churches, cathedrals, and châteaux; throughout, in fact, the whole range of military, civil, and religious architecture of a district. All works of interest appropriate to the subject will be accepted for exhibition.

The Records exhibited will be classed in two categories.—*First*: Paintings, drawings, engravings, and photographs, selected to show traditional local design in the respective regions. It should be clearly understood that this is no "dilettante" exhibition of art or archæology, but a collection of working documents illustrating the natural laws of climate, local materials, and surroundings, which have governed architectural development. From the study of these laws—practically unchanged by time—must be deduced that structural basis of design which may be adapted to existing custom and requirement. *Second*: Maps and diagrams indicating the degree and distribution of ruin. These will, probably, be furnished by the Army photographic and geographic sections, as well as by the Valuation Officers and District Committees. Schedules of the natural materials (or, at need, of artificial substitutes) available for building have been promised by the great building firms of Eastern France.

The programme of the Exhibition, of which the foregoing is a summary, promises very valuable results; and the Council of the Royal Institute will doubtless consider how far it may be proper to assist by the loan of original documents from the Library. The measured drawings and sketches of British architects are of acknowledged excellence, such work having, until recently, been the foundation of their professional education; even now a fine tradition of those studies gives them a more important place in the School curriculum of students here, than it has abroad. It is to be hoped that members of the Institute who have, in their portfolios, drawings of work in the districts indicated, which are likely to aid the Société des Architectes-Diplômés in their spirited effort, will send them to the Secretary of the Royal Institute without delay. The last day for their delivery in Paris is the 15th December, and transport is slow and uncertain in these times. Our friends in Paris may be trusted to take good care of, and return all contributions in due course. A handsome British *envoi* will be accepted by them as

* As readers may not have at hand a map of "France en provinces," I venture to give the corresponding "Départements": PICARDIE: Somme (chef-lieu, Amiens). ARTOIS: Pas-de-Calais (Arras). FLANDRE: Nord (Lille). CHAMPAGNE: Haute-Marne (Chaumont), Aube (Troyes), Marne (Châlons-s-M.), Ardennes (Mézières). LORRAINE: Vosges (Epinal), Meurthe-et-Moselle (Nancy), Meuse (Bar-le-Duc). ALSACE: (Strassburg, Belfort). ÎLE-DE-FRANCE: Seine (Paris), Seine-et-Marne (Melun), Seine-et-Oise (Versailles), Oise (Beauvais), Aisne (Laon).—J. W. S.

proof of something more than a desire to take part in their enterprise; as a sign, to wit, of that solid identity of interests which shall send the allied nations victorious—the Vandal trampled underfoot, and Art triumphant.

REVIEWS.

BUILDING CONSTRUCTION DEVELOPMENT.

The Development of British Building-Construction. [Cambridge Technical Series.] By C. F. Innocent, A.R.I.B.A. 8s. 1916. 10s. 6d. net. [Cambridge University Press.]

Mr. Innocent has given us a most interesting and illuminating book.

Until recent years we have studied either the buildings dedicated to the service of God, or the halls and castles of the great, and little account has been taken of the work of the humbler people at the same period. There were, speaking generally, two types of building through the middle ages, one of wood and wattle, where rigid economy was the first consideration; the other of stone, where permanency or strength was the leading note. The first class was indigenous to the soil and developed from the rude circular hut formed of the materials easiest to hand, but the second had its roots in the stone buildings of the Romans. Gradually we find the two methods overlapping and combining, the wattle wall gives way to stone, and the wooden partition appears in the more solid buildings, until in Yorkshire and the Cotswolds we get the perfect type, echoes of which are to be found in all parts of the country. This fusion of the two methods is outside the scope of Mr. Innocent's work, and, as houses of this class have already been ably dealt with by several writers, he wisely confines himself to the buildings which owe their origin to the circular hut, like that of the Yorkshire charcoal-burner or one which the reviewer has recently seen in the forests of the Vosges, and it is with this type that he opens his subject.

Passing by the rather more advanced rounded oblong type, with short ridge-piece, we come to the buildings which have their ridge supported by forked posts, which are shown by documentary evidence to have existed in England, though only foreign examples now remain.

Two chapters following deal with curved tree principals, and we reach the realm in which many fine old examples exist, and very charming some of them are. Although we cannot now roof our smaller churches or halls with curved oak crucks, still it is possible that roofs starting from the floor, with rigid stiffening between the wall pieces and the principals, have not received all the attention they deserve as a very beautiful and practical form in our present-day work.

In the next chapter we pass on to fully developed roofs and those with post pillars forming nave and aisles, and this chapter also contains some very interesting theories on the raising of the forked post from

the floor to become the king post standing on the tie beam.

Presently we have unfolded to us the history of the carpenter and the materials he worked in. Wooden walls then claim our attention, and this leads us on to the many charming forms of post and panel, post and plaster, and boarded partitions, another subject which the modern architect may perchance find worthy of practical consideration and one which might have been treated at greater length had space permitted. Wattle, cob and brick walls are also considered, and their materials.

We next reach floors and staircases. Open floors are a practical consideration, saving height, and there are many good soundproof ways of plastering between the rafters. The older stone staircases of the cottages were possibly not inside the scope of the work, like the later wooden ones, but they form a most interesting series in Wales, and no doubt in other parts also.

We now reach a very important point, that of roof coverings, and we begin with slating, the history of which is traced from the original wood shingles which were very largely used in early times. Stone slates and Welsh slates are examined and the methods of laying and cutting explained. Mossing is also dealt with. Sphagnum was used in North Wales; what, we wonder, was used in England?

As a side issue, Mr. Innocent expresses his opinion that the use at the present day of stone slates is "anachronistic and uneconomic"; it is, however, difficult to see why we should not use a beautiful and sound material, in its proper surroundings, if we can get it; surely a beautiful roof is the first essential for a beautiful building. The advent of large thin Welsh slates into all parts of the country is, as Mr. Innocent says, most unfortunate. The fact is that the blue and purple slates, if small and thick, are absolutely right in their green and purple native country, but in some parts of England are out of harmony with the local colouring. All kinds of beautiful greens and russets can, however, be had in Wales, but the large thin ones of any colour are not beautiful anywhere, and very breakable.

A long but interesting chapter on thatching follows, and then we are led on to the subject of windows and chimneys. Several interesting old wattle and daub hoods over stone hearths are to be seen in the Bettws-y-coed district; and in S. Wales, old cottages in the valley of the Teivy have smoke holes or chimneys formed of reed thatch, probably like those said to have existed in various parts of the country.

The final chapter is devoted to new materials, of which the most important is probably Portland cement, at any rate for work in the country, where,

as a whole, the old methods are still the cheapest and best, and where the architect's first duty is to build in harmony with Nature. The old builders, we find, considered the practical and economical first, but clothed it beautifully and were not hampered by exotic styles. Economy will again be a leading note after the war, and with returning simplicity will surely be greater opportunities for returning beauty. All is lost if we lose faith in the new era to come.

The book is well illustrated, and is full of interest for the archæologist as well as for the architect, but space does not permit us to treat of it from any point of view but that of the latter. It is, alas! the eleventh hour in which to study the simple building methods of our mediæval forefathers, for in another generation the few relics that remain will have disappeared, and we earnestly hope with Mr. Innocent that his fine effort will inspire others to study more carefully the old buildings of their neighbourhood and preserve some definite records of them before they cease to be.

HERBERT L. NORTH [F.].

MR. CRACE'S GIFT TO THE INSTITUTE.

It is a pleasure to record the recent presentation by Mr. John D. Crace [*Hon. A.*] to the Royal Institute of three portfolios containing sketches and drawings of old work made by him.

The drawings (prepared no doubt in the course of many a pleasant tour) were made at different times during the past half-century (some are dated 1858, and the more recent ones bear the date 1906). In his communication accompanying the gift Mr. Crace states that these drawings were made for his own instruction with the object of recording the true tones of colour and their correct relation to one another. Further, wherever possible, the attempt was made to learn the true intention of the artist.

It would be difficult for a travelling student to have better principles than these for guidance in his work.* The drawings consist chiefly of studies from colour decoration in Italy, while the remainder are pencil sketches of architectural subjects both in England and abroad. The collection contains several studies of ceilings of Renaissance date in Venice, such as, for instance, that by Paolo Veronese at San Sebastiano, and other well-known examples from S. M. dei Miracoli and the Scuola di San Rocco. There are also sketches made in Rome, Orvieto, Siena, and Assisi. The English subjects include studies of the remains of mediæval painted work at Canterbury Cathedral, Chichester, Botgrove, &c.; and there are several sketches in pencil of various details such as seat-ends, roofs, porches, &c.

The drawings should prove of much value to stu-

* In this connection one may suppose that the drawings will be particularly interesting to competitors in the Owen Jones Travelling studentship. Herein would be a certain appropriateness, as for some years past Mr. Crace has served on the Prizes and Studentships Committee as one of the judges in this particular competition.—G. C. H.

dents, and will be of especial interest to the users of our collections because so many of them are such excellent examples of careful "note-taking" of old work, with both brush and pencil; and also because many of the coloured drawings—particularly those of recent date—exhibit a remarkable delicacy of colouring, and a sure touch of the brush, which combine to emphasize not only the care and enthusiasm which the author brought to bear upon his studies, but also his sympathy with the beauty of the fine work of the past.

GERALD C. HORSLEY [F.].

CORRESPONDENCE.

"Failures" at the National Gallery.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—Being very much in accord with the criticisms contained in Mr. A. E. Richardson's appreciative and well-considered review of "The Arts and Crafts Movement" published in the last issue of the R.I.B.A. JOURNAL, I may, perhaps, without questioning some of the opinions expressed, be allowed to call attention to a mere matter of fact, inasmuch as the writer has evidently made a mistake about what he calls "the joint failures of William Wilkins and Sir Charles Barry" when dealing with the façade of the National Gallery. Barry in 1848 made a design which was never carried out, and Wilkins, as the architect in charge of the building, very naturally resented Barry's intrusion when he previously made a voluntary sketch showing how he would like to treat its elevation. At no time were Wilkins and Barry associated in any joint proposal—indeed, quite the contrary, for the former was very irate, and the latter, knowing he was in error, kept quiet and said nothing about Wilkins' warmly-stated charges. Sir Charles Barry did nothing actually to the National Gallery, and Bishop Barry's Life of his father is quite clear on that point. After the Law Courts Competition award had been compounded and when G. E. Street, R.A., was appointed, E. M. Barry, R.A., was promised some work then contemplated at the National Gallery. It had been found that Barry's exterior for the Courts of Justice could not be brought into conformity with Street's plans, and so Barry had to give way. Subsequently E. M. Barry added the rear galleries to the National Gallery on the eastern part, but these do not show from Trafalgar Square frontage view save only a tower excrescence which, as it is left, looks very out of place apart from what the architect had intended as a support in the skyline. The erection by Ewan Christian, assisted by James K. Colling, of the National Portrait Gallery at the back of the site, and a part of the east flank frontage of the National Gallery itself, prevented the continuation of E. M. Barry's plans; so the "failure," such as it is, cannot fairly be attributed to him.

MAURICE B. ADAMS [F.].



9 CONDUIT STREET, LONDON, W., 25th November 1916.

CHRONICLE.

The R.I.B.A. Record of Honour : Thirty-seventh List.

Fallen in the War.

- CHESTERTON, 2nd Lieut. FRANK SIDNEY, R.F.A.
Died of wounds received in action 11th November.
- WESTWOOD, 2nd Lieut. WALTER R. [Student], R.F.A.
Died of wounds on 26th October. Aged twenty-two.
- CAUDWELL, Private ARTHUR CYRIL [Licentiate],
Queen's Westminster Rifles. Killed in action on
10th October.
- PATERSON, Private HENRY FRANKLIN, Hon. Artillery
Company [Probationer]. Killed in action on
30th September, 1915. Aged twenty-one. Second
son of Mr. H. L. Paterson [A.], of Sheffield.

Members' Sons.

- BALFOUR, 2nd Lieut. GEORGE J., H.L.I., attached to
the Northumberland Fusiliers. Killed in action
on 15th September. Aged nineteen. Son of Mr.
Andrew Balfour [F.], of Glasgow.
- SAWYER, 2nd Lieut. HERBERT, Suffolk Regiment.
Killed in action on the 12th October. Aged
twenty-six. Son of Mr. Joseph Sawyer [F.], of
The Tower, Kenley, Surrey.
- BOWLES, 2nd Lieut. B. J., The Buffs. Killed in action
in September last. Son of Mr. Charles W.
Bowles [F.].
- GOLDSMITH, Capt. LEWIS W., Yorkshire Regiment.
Killed in action on 5th November. Aged twenty-
one. Son of Mr. F. T. W. Goldsmith [F.].

Serving with the Forces.

ASSOCIATE.

LING, RICHARD BERTRAM, R.A.M.C.

LICENTIATES.

ARABIAN, JOHN; East Surrey Regiment.
GRAY, JAMES; Royal Engineers.
SALKELD, T.; Royal Engineers.

Promotions.

- BEREFOOT, Lieut. Leslie [A.], has been promoted to Cap-
tain, R.A.M.C.
- BRUCE, REGINALD [A.], of the Artists' Rifles, has been
gazetted 2nd Lieut., Royal Engineers.
- HEMBROW, JAMES [A.], formerly Sergeant R.E. in the
Territorial Force, is now 2nd Lieut., R.E., Regulars.
- McLEAN, A. J. [A.], of the Artists' Rifles, has been gazetted
2nd Lieut., South Lancashires.

Award for Conspicuous Gallantry.

The *London Gazette* announces that the King has been graciously pleased to confer the Military Cross upon 2nd Lieut. William Godfrey Newton, London Regiment, "for conspicuous gallantry in action. He placed a lamp in the open to guide a night assault. Later, although wounded, he rallied the men round him and bombed the enemy with great courage and determination. He set a fine example." Lieut. Newton is the President's youngest son, an Associate of the Institute, and before the war a member of the Literature Standing Committee.

The Shortage of Houses : Sir William Lever's Proposal.

Following upon a series of articles on Town Planning in relation to the national house shortage, the *Liverpool Courier* of the 4th and 6th November published two important articles by Sir William Lever [Hon. A.] in which some valuable suggestions are put forward for the solution of the problem of house shortage.

In his first article Sir William expresses the opinion that there is no half-way house between the Government—through municipalities, or directly—building the houses and finding the whole of the money and letting them at such rentals as can be obtained. Such rentals would be certain to show a heavy loss, but that loss would have to be faced, like losses caused by the war, in the interests of the health, efficiency, and well-being of those for whom the cottages were intended. The loss, it is suggested, might be met by a free gift of the site of the cottage. This would give the builder at once a margin of a freehold site on which to build his house. He would then be able to finance the cost of the house, and the remaining margin he would probably be willing and able to find. Municipalities must face the task of offering facilities for the erection of better cottage houses in suburban districts, the rents of which, together with the cost of transport of the occupiers to and from their daily work, should be less than the rental demanded for inferior houses in the congested districts. The benefit would be two-fold. There would be provided newer and better houses for the working classes, and a blow would be struck at the evil of overcrowding.

Sir William considers that there is no better way in which this can be done than by the municipality acquiring suburban land in large quantities, at reasonable prices, and offering it absolutely free for the immediate erection thereon of cottages, in conformity with building bye-laws specially drawn up for dealing with the scheme. This may sound at first a very revolutionary proposal, and may be considered unfair to the remaining portion of the population. But it is not revolutionary, because there is ample precedent for it. We have admitted the nation's responsibility for the education of children, and have recognised that the only way to ensure that all children are educated is to make education free. We now see that the millions we spend annually on education are to a certain extent wasted, owing to improper housing. Therefore, to give free land to ensure proper housing is only the application of a principle already accepted. As to the objection that it is unfair to put the expense on the remaining portion of the population, Sir William points out that the rates payable on the property built on this free land would not only pay for the land but would result in a profit to the municipality.

To the question whether it is absolutely necessary to provide free land, Sir William replies that there is no other way. All other methods are simply tinkering with the evil. Corporations, and notably London, Liverpool and other large cities and towns, have built blocks of workmen's dwellings, and anything more hideous, more undesirable for the rearing of a family, or more wasteful of the public money it would be impossible to find. Looking at these

blocks of buildings in London and elsewhere, one wonders what the nation will become after a few generations have been reared under such conditions.

From the point of view of the municipality, Sir William shows how the free gift of land for building purposes would work out. The Corporation has an acre of land which has cost them, say, from £100 to £200, and on which they permit the building of twelve cottages of a rateable value of £15 each. They would at once have a rateable value of £180. The interest and sinking fund on the site would therefore be more than covered by the increment to the rates. It is also suggested as a stimulus to building by private enterprise that the cost of roads and drainage should be borne by the municipality. The proposition will have to be made attractive enough to induce the wholesale building that is required to overtake the present starvation in cottage houses. But in making it attractive to the builder we must do so on such grounds that the personal interests of the builder will induce him to make his cottages attractive to the tenants. To the argument that the mere giving of the land would effect no reduction in rents, that the cottages built on free land would not necessarily be let at such rentals as to attract tenants from the centre to the suburbs, Sir William replies that dear land is the chief cause of high rents for cottage houses, and that cheapening the land would be the most powerful factor in reducing rentals. Let municipalities use care and judgment in securing suitable sites and they will find builders not slow to avail themselves of the advantages offered. Competition would prevent the demand of excessive rents.

In his second article Sir William Lever contends that all schemes for financing the actual building by the Government are bound to be futile. The Government has no machinery for dealing with the question. It is a most difficult and delicate matter of adjustment to place cottage houses just where they are wanted. There are, in addition, so many other things that go with the building of cottage houses, such as the provision of churches, chapels, Sunday-schools, recreation halls, etc.—all of them matters which are much better dealt with by the community.

Sir William mentions a building scheme undertaken by the Government since the war began which has been a complete failure. An estate was laid out at Woolwich by Government officials. It was done in the usual way of "turny-twisty" curves intended to look attractive, and which do look attractive—on paper. But the whole of the estate was built up without any provision at all for a day school, and no sites were reserved for churches or chapels, Sunday-schools, or assembly halls. Again, anyone coming from the centre of this district and wanting to catch a tram passing on the high road would have to go considerably out of his way and make a series of turnings in order to get to the main road, owing to the curves being made parallel to the main road and only connecting with it at the two ends of the estate. Sir William mentions that when he visited the place children had to go 1½ miles to the nearest school. The whole of this blunder arose, he believed, through the instructions to the Government architect to plan for the building of 1,400 houses, no instructions being given to reserve land for playgrounds, schools, chapels, or recreation halls. Consequently the architect would have been exceeding his duty had he made provisions for these extra purposes. Otherwise these cottage houses at Woolwich are extremely well planned and designed, and make healthy houses for those who live in them.

Sir William gives an instance of another kind of blunder—a house built in a hilly district of Yorkshire at a cost of several thousand pounds, which is entirely unsuited to its surroundings. In Surrey the house would have been a poem and a picture. The unfortunate lady for whom it was built never could live in it in the winter, as the high winds drove the rain through the walls as though through a sponge. In these hills and dales of Yorkshire a certain

type only of building material is suitable; the construction has to be done in a certain way, which has been discovered by the wisdom of generations of builders working through the centuries. Local technical knowledge is required in housing.

His own experience at Port Sunlight of workmen's houses is that they must fit the tenant like a glove. In turning a corner, houses had sometimes to be made a little larger than the usual pattern; but they had always difficulty in letting such a house, because an extra yard in the width of a room means so much more work for the wife, who cannot afford to have her labour increased unnecessarily in the house.

Again, one type of house cannot be applicable to more than a limited area. Each locality seems to build up in the centuries a certain type of cottage which suits the people and their environment. This type is known in every shade of colour and variety to the local builder. These various local types could not possibly be known to a central organisation somewhere in London, acting on behalf of the Government, and preparing plans for 100,000 to 200,000 cottages, to be built more or less in a panicky way to deal as promptly as possible with overcrowding.

Exception has been taken to the limitation of houses to some 10 or 12 to the acre. Speaking from his own experience, this limitation Sir William considers absolutely essential. There ought to be an area of grass between the house and the footpath, so that dust will not reach the open windows in the heat of summer. Equally there ought to be allotment gardens at the back, which means both recreation and health, while in many cases the produce of the garden would actually pay the rent.

While opposed to the municipality or Government undertaking the wholesale building of cottages, Sir William is strongly in favour of the municipality or Government drawing up a Town Planning scheme for the erection of cottage houses on broad lines before they permit a single cottage to be built.

English Mediæval Wall Paintings.

An exhibition of copies of English ecclesiastical mural decoration of the twelfth to the sixteenth century has been arranged in Room 72 of the Victoria and Albert Museum. These copies, which have been painted in water-colour by Mr. E. W. Tristram during the last nine years, have recently been acquired for the Museum, where it is proposed to form an extensive collection of representations of this once popular branch of our native art.

As is well known, from Norman times until the Reformation English churches were filled with paintings which depicted themes inspiring to the popular mind, such as scenes from the life of Christ, the legends of favourite saints, and occasional secular subjects from which a moral could be drawn. At the Reformation the paintings were obliterated by coats of whitewash, and many were destroyed. The process of removing the whitewash, chiefly during the nineteenth century, has in numerous cases revealed the paintings irreparably damaged, and liable to perish when again exposed to light.

Some of the paintings have already disappeared since the copies now exhibited were made. This fact shows how necessary and urgent it is that a great national collection of copies of these paintings should be formed, to preserve an adequate record of this great activity in our early English art.

The copies exhibited comprise a set of the Westminster Abbey paintings, including the series from the Judgment which adorned the east wall of the Chapter House, the sedilia paintings, and an exquisite fragment from a panel of the altar retable now in the Jerusalem Chamber, depicting the Miracle of the Loaves and Fishes. St. Albans is represented in the series of Crucifixions and Madonnas

which are painted on the Norman piers in the nave; York by three fine paintings from the old wooden vaulting originally in the Chapter House, but now removed; and there are, among others, paintings from Chichester, Ely, Norwich and Winchester, making altogether close on a hundred examples.

MINUTES.

At the First General Meeting of the Session 1916-17, held Monday, 6th November, 1916, at 3.30 p.m.—Present: Mr. Ernest Newton, A.R.A., President; 51 Fellows (including 16 members of the Council), 8 Associates (including two members of the Council), and numerous visitors,—the Minutes of the Meeting held 19th June, having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced the names of the following members serving with the Forces who had been killed in action since the last meeting:—Major Herbert Phillips Fletcher, D.S.O., *Croix de Guerre*, R.F.C., elected Associate 1889, Fellow 1902, Godwin Bursar 1904; Captain Alfred Edward Corbett, Border Regiment, of Manchester, elected Associate 1897; Captain Joseph Berkeley Cubey, Northumberland Fusiliers, elected Associate 1908; Lieut. Lawton Stephen Ford, Queen's Royal West Surreys, Student, son of Mr. Lawton R. Ford, Associate; 2nd Lieut. Donald Jervis Gordon, Border Regiment, Student, son of the late Mr. Thomas Gordon, Associate; 2nd Lieut. Douglas Morley Griffen, King's Liverpool Regiment, of Liverpool, elected Associate 1914; 2nd Lieut. John Kingston Ground, Royal West Kent Regiment, of Maidstone, elected Associate 1912; 2nd Lieut. Andrew Danskin Aitken, Royal Engineers, of Airdrie, elected Associate 1896; Private Balfour Abercrombie, Black Watch, *Licentiate*; Lieut. Charles Stonehouse, East Lancs Regiment, elected Associate 1910; Lance-Corp. Edward Woodhouse Stubbs, Royal Army Medical Corps, elected Associate 1910; Corporal Arthur Finch, West Yorks Regt., of Leeds, elected Associate 1911; 2nd Lieut. Joseph William Bull, Royal Engineers, elected Associate 1914; Captain Noel Waugh Hadwen, Duke of Wellington's Regiment, elected Associate 1910; Lieutenant Alfred Edwin Shapley, Northumberland Fusiliers, *Probationer*; Private Alfred Edgar Stott, King's Liverpool Regiment, Student; Captain Percy Cunliffe Pilling, Loyal North Lancashire Regiment, elected Associate 1904, son of Mr. Joseph Pilling, of Bolton, Fellow; Lieutenant Francis Grissell, Coldstream Guards, elected Associate 1913; 2nd Lieut. Philip Edward Webb, Royal Engineers (son of Sir Aston Webb, Past President), elected Associate 1912, Associate Member of Council 1915; Captain R. M. Haig Philp, Royal Field Artillery, of Sydney, New South Wales, elected Associate 1914; Captain Tom Sadler Rushworth, City of London Regiment, son of Mr. Wm. Rushworth, Fellow, of Durham, elected Associate 1913; Private Ernest Scott Petch, Royal Scots, elected Associate 1909; Lance-Corp. Joseph Henry Taylor, Royal Army Medical Corps, elected Associate 1908; Lieut. Wm. M. Jenkins, Welsh Pioneers, Student; Private Arthur Samuel Bagshawe, Yeomanry, Student; Private James Ellis Braithwaite, West Yorks Regiment, of Leeds, elected Associate 1906; and 2nd Lieut. Alick George Horsnell, Suffolk Regiment, *Tite Prizeman* 1906, *Soane Medallist* 1910.

On the motion of the Hon. Secretary, it was RESOLVED that the deepest regrets of the Institute for the loss of these gallant lives be entered on the Minutes of the meeting, and that a message of members' sincerest sympathy and condolence be forwarded to their relatives.

The decease was also announced of James Burgess, C.I.E., LL.D., F.R.S.E., Hon. Associate, and Sir James Dromgole Linton, P.R.I., Hon. Associate, and a vote of condolence was passed to their near relatives.

Further, the decease was announced of David Bird

elected Associate 1889; Edward Thornton, elected Associate 1892, Fellow 1904; Theodore Knolles Green, elected Associate 1861; Charles Rennels Hancock, elected Associate 1882; and Richard Phené Spiers, elected Associate 1861, Fellow 1877.

On the motion of the Hon. Secretary, seconded by Professor Beresford Pite [F.], it was RESOLVED, That the Royal Institute do record its high estimate of the valuable and productive labours of its late distinguished Fellow, Richard Phené Spiers, for the advancement of architecture, and its grateful appreciation of his eminent services as a mittee; that the Institute do record its sense of sorrow at his loss, and that a message of sympathy and condolence be conveyed to his near relatives.

The President having announced that Lieutenant Francis Grissell, who was killed in action on the 15th September, had bequeathed to the Institute the sum of £500, and expressed the wish that it be used for the benefit of the Library, it was RESOLVED, That the Institute do express to Mr. F. de la Garde Grissell, the sole executor, its appreciation and thanks for the generous legacy bequeathed to the Institute by Lieutenant Francis Grissell, and do assure him that the testator's wishes as to the use for which the legacy is to be applied shall be faithfully carried out.

The Assistant Secretary announced the results of the October Statutory Examination.

The Assistant Secretary announced the nomination of the following candidates: As FELLOWS (8): Frederick Chatterton [Associate, 1896], Cairo; Arthur Cecil Morris Edwards [Associate, 1908], Bexhill-on-Sea; George Reavell [Associate, 1899], Alnwick; together with the following Licentiates who have passed the Qualifying Examination: John Samuel Alder; Rodney Howard Alsop, Melbourne; Claude Waterlow Ferrier; Walter Symington Athol Gordon; Algernon Sydney Richard Ley. As ASSOCIATES (12): John Ramsay Armstrong, Perth, Scotland; Charles Joseph Brandon; Robert Kitching Ellison, Bedford; Sidney Colwyn Foulkes, Colwyn Bay; Arthur Rowland Holman, Exeter; Lorne de Hutton Hutton; Norman Pisto Keep; Robert Lowry; Heinrich Martin Luyken; Arthur John Sparrow; Harold Edgar Todd, Bristol; James Frederick Wilson, Newport, Mon.

The President having delivered the OPENING ADDRESS, a vote of thanks was passed to him by acclamation on the motion of Professor Beresford Pite [F.], seconded by Captain R. Burns Dick, R.G.A. [F.], President of the Northern Architectural Association.

The President having called the attention of the meeting to the exhibition in the meeting-room of competition drawings and designs and working drawings of churches carried out by the late George Edmund Street, R.A., representing a selection from a numerous collection of drawings presented to the Institute by his son, Mr. Arthur Edmund Street [F.], it was, on the motion of the President, RESOLVED, That an expression of the Institute's grateful appreciation of this interesting and valuable gift be entered on the Minutes and communicated to Mr. Street.

The proceedings closed at 4.55 p.m.

THE EXAMINATIONS.

The Statutory Examinations.

An Examination qualifying for candidature as District Surveyor in London was held by the Institute pursuant to Statute on the 18th, 19th, and 20th October. Three candidates attended, and the following passed:—

WILLIAM DODDINGTON, 181 Queen Victoria Street, E.C.
HAROLD EDWARD WATKINSON, 79 Leslie Road, East Finchley, N.

The successful candidates have been granted by the Council certificates of competency to act as District Surveyors in London.

NOTICES.

Election of Members, 18th December.

An election of members will take place at the Business Meeting of the 18th December in accordance with the provisions of By-Law 10. The candidates found by the Council to be eligible and qualified for membership according to the Charter and By-laws, are as follows:—

AS FELLOWS (8).

CHATTERTON: FREDERICK [*Associate*, 1896]; Ministry of Public Works, Cairo; and Turf Club, Cairo.

Proposers: Robert Williams, A. W. S. Cross, and George Hubbard.

EDWARDS: ARTHUR CECIL MORRIS [*Associate*, 1908]; Sea Road, Cooden Beach, Bexhill-on-Sea.

Proposers: Arnold Mitchell, W. Campbell Jones, and W. D. Caröe.

REAVELL: GEORGE [*Associate*, 1899], Lloyd's Bank Chambers, Alnwick; and Prudhoe Street, Alnwick.

Proposers: Sir Henry Tanner, Chas. B. Flockton, and Jas. T. Cockett;

together with the following Licentiates who have passed the Qualifying Examination:

ALDER: JOHN SAMUEL; 1 Arundel Street, Strand, W.C.; and 33 Bedford Gardens, Kensington, W.

Proposers: Maurice B. Adams, Percival Currey, and Andrew N. Prentice.

ALSO: RODNEY HOWARD; 90 William Street, and Wingfield, Stonnington Place, Malvern, Melbourne, Australia.

Proposers: Robert J. Haddon, Walter R. Butler, and the Council.

FERRIER: CLAUDE WATERLOW; 11 Waterloo Place, Pall Mall, S.W.; and 34 Cavendish Square, W.

Proposers: Sir Aston Webb, Keith D. Young, and William A. Pite.

GORDON: WALTER SYMINGTON ATHOL; 5 Old Bond Street, W.; and Holland Lodge, Walton-on-Thames.

Proposers: James S. Gibson, Edmund Wimperis, and Herbert Wigglesworth.

LEY: ALGERNON SYDNEY RICHARD; 214 Bishopsgate, E.C.; and Montague House, Sidcup, Kent.

Proposers: Howard Chatfield Clarke, John Murray, and Wm. Woodward.

AS ASSOCIATES (12).

ARMSTRONG: JOHN RAMSAY; Admiralty Works Department, Perth; and 2 Marshall Place, Perth.

Proposers: Jno. Watson, H. Ramsay Taylor, and Jas. Cumming Wynnes.

BRANDON: CHARLES JOSEPH; 7 Trebovir Road, Earl's Court, S.W.

Proposers: Robert Atkinson, Charles E. Varndell, and Percy B. Tubbs.

ELLISON: ROBERT KITCHING; Shire Hall, Bedford; and 13 Shaftesbury Avenue, Bedford.

Proposers: Roland Plumb, H. G. Crothall, and Fredk. Willey.

FOULKES: SIDNEY COLWYN; Central Chambers, Colwyn Bay; and Mansfield Groes Road, Colwyn Bay.

Proposers: C. H. Reilly, G. A. Humphreys, and C. Ernest Elcock.

HOLMAN: ARTHUR ROWLAND; Castle House, Exeter; and Strand, Topsham, Devon.

Proposers: Henry Budgen, James Crocker, and the Council.

HUTTON: LORNE DE HUTTON; 11th Officers' Cadet Battalion, Staff College, Camberley, Surrey.

Proposers: Robert Atkinson, Henry M. Fletcher, and A. G. R. Mackenzie.

KEEF: NORMAN PRISTO; c/o C. Wontner Smith, Esq., 12 Gray's Inn Square, W.C.; and 15 Belleville Road, Wandsworth Common, S.W.

Proposers: C. Wontner Smith, Arthur Keen, and A. G. R. Mackenzie.

LOWRY: ROBERT; 5 Park Road, East Twickenham.

Proposers: Robert Atkinson, A. E. Richardson, and Charles E. Varndell.

LUYKEN: HEINRICH MARTIN; Chief Engineer's Office, Port of London Authority; and 23 Arcadian Gardens, Wood Green, N.

Proposers: Walter R. Jaggard, and the Council.

SPARROW: ARTHUR JOHN; 12 Russell Square, W.C.; and Ingram House, Stockwell Road, S.W.

Proposers: James A. Swan, A. Saxon Snell, and William A. Pite.

TODD: HAROLD EDGAR; 15 Clare Street, Bristol; and Harts Cottage, Almondsbury, near Bristol.

Proposers: W. H. Watkins, C. F. W. Denning, and Frank W. Wills.

WILSON: JAMES FREDERICK; Borough Architect's Dept., Newport, Mon.; and 40 Upton Road, Newport, Mon.

Proposers: A. R. Jemmett, Charles J. Dawson, and Charles F. Ward.

Election of Members, 8th January, 1917.

In accordance with the provisions of By-law 8, the names and addresses of the following applicants for membership are published below for the information of members. Notice of any objection or other communication respecting them must be sent to the Secretary, R.I.B.A., for submission to the Council prior to Monday, 18th December:—

AS FELLOWS (3).

ERRINGTON: CHARLES SEPTIMUS [*Associate*, 1895], Victoria Buildings, Grainger Street West, Newcastle-upon-Tyne; Benwell Grove Lodge, Newcastle-upon-Tyne.

SWASH: FRANK STANLEY [*Associate*, 1912], Field's Park Avenue, Newport, Mon.

TRAVERS: WILFRID IRWIN [*Associate*, 1906], Lieut. R.E.; c/o Bernard MacDonald, 34 Avonmore Road, West Kensington.

Licentiates and the Fellowship.

The next Examination of Licentiates desiring to qualify for candidature as Fellows will take place in January, 1917. Application for admission to the Examination must be sent in by the end of the current year. Full particulars may be had on application to the Secretary R.I.B.A.

Books Received.

Port Sunlight: A Record of its Artistic and Pictorial Aspect. By T. Raffles Davison, Hon. A.R.I.B.A. 8m. 4to. Lond. 1916. 5s. net. [B. T. Batsford, Ltd.]

Victoria and Albert Museum.—Review of the Principal Acquisitions during the year 1915. Illustrated. 8m. 4to. Lond. 1916. [His Majesty's Stationery Office.]

The Ancient Cross Shells at Bewcastle and Ruthwell. By the Right Rev. G. F. Browne, D.D. (C. & O.), D.C.L., LL.D. 4to. 1916. 7s. 6d. net. [Cambridge University Press.]

The Builder's Foreman: A Practical Guide to his Training. By J. F. Outram. With 120 illustrations. 8o. Lond. 1916. [Batsford, 94 High Holborn.]

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THE STUDY OF ANGLO-SAXON ART.

By PROFESSOR BERESFORD PITE [F.]

ARCHITECTS not having any notion of including the Anglo-Saxon style in their eclectic or competitive practice of phases of Christian art, have dimly felt its historic interest. Norman asserted its vogue early in the dawn of modern romanticism, and ecclesiastical edifices with distended windows illustrated the elasticity of the style and the necessary liberty of the architect. Amidst the haunts of Dr. Samuel Johnson, and slightly subsequent to his era, the Church of Holy Trinity, Gough Square, furnishes an example, and in vacation one recalls an extensive chapel at Ramsgate emulating the not unsuccessful adaptation of Boston Steeple in the Parish Church. These are sample first-fruits, but even the Natural History Museum, by the uninstructed called "free-Norman," and some quite recent churches—there is one at Oxford—make it evident that the hard doctrines of the stylists of the Gothic revival have not excluded its proper ancestor, with her barbaric decorations, from the architectural palette.

Anglo-Saxon architecture does not offer sufficient material for the purposes of such revival, or apparent relationship to her Norman supplanter, and therefore the venerable remains of an authentic mother have been neglected in the mausoleum in which British architects surrendered most of the possibilities of useful study of the arts during the greater part of a century that should have been truly progressive. To-day we are suffering from a ridiculous susceptibility to the weird. It is with trepidation therefore that we recall the native charm and wonder of Saxon sculpture, in the presence of Mr. Gill's archaistic "Stations" in Westminster Cathedral, or the existence of triangular tile arches, baluster shafts, or the economy of long and short coigning, in the presence of distinguished exponents of Garden Suburb primitiveness, to whom the sincere expressiveness of vertical and horizontal stretcher brick coigns may appeal.

The exhaustion of the Gothic detail Museum is leading to an equally unintelligent assumption of uncouth crudity of form, which may yet light upon inspiration in primitive or even prehistoric architecture, as a stimulant to wandering and aimless souls. True architecture, to-day and any day, must, in spite of all protestation, be original. Modern needs, uses and amenities, in extensive planning, detached building, or complementary detail and ornament, if it is art at all, intending to be permanent, sensible and purposeful, is essentially original modern art. What really matters to the architect and to the world that suffers him, is that the art or work is genuine or fallacious; that is, good or bad. Our present disease is a detachment of the retina, a half blindness, that dissociates our practical work in design from its due place as part of our modern culture and life, and conforms it to the merely superficial and ephemeral standards of pseudo-aestheticism. Nourishing a continual grudge against the intrusion of scientific experiment in building, which is unthinkable of a Primitive or Mediæval builder, the student does not seek to be modern, his idea is contrary and seeks conformity to some historic semblance

or proportion that arose originally as experiment; so dislike is cultivated to bricks of standard size, new materials or plate glass, and by perversion of motive architecture is reduced, by artificiality, to pedantry.

An ample understanding of the spirit of the builder-artists of the pre-Renaissance would correct this pedantic zeal. The Norman energy and the Gothic motive were sincerely scientific and intensely modern. The work of these periods in its method, or style properly so called, should be re-studied as the reflection of the maximum current knowledge of building science. The true disciple enthusiast, the live archaeologist, the student with executive purpose in mind, will find inspiration and new hope for the extended opportunities and means of his own age in a sympathetic examination of the intention, rather than by copying the limitations, which were ever being cast aside in the rapid progress, of Mediæval architecture.

Such an ideal of study remains open; exhausted types yield new vigour if interrogated in their native atmosphere of constructive and decorative motive; and respect for ourselves, as factors in an epoch that is certainly stimulating and productive, will assist us to understand and follow the teaching of those who, with relatively inferior means, attained a unified art that at present appears to be incomparably superior to our ideals.

It ought to be impossible, in surveying our national history, to overlook the constituents or the ideals of our island race; it is therefore absurd, though for long it has been attempted, to relegate the art of the Anglo-Saxons to the limbo of almost prehistoric unimportance, to which for the purposes of architectural study it has been consigned by the introductions to handbooks to Gothic architecture.

Anglo-Saxon art is that of one semi-millennium of our comparatively short national history of about fifteen hundred years, a period, though slow and intermittent, of formation and of originating movement. Its reign begins with the romance of the unique repudiation of Roman civilisation and includes the almost successful struggle of pagan immigrants with the Christianised natives; an epoch certainly as characteristic as the invasion that ushered in the Gothic era, or the Reformation that terminated it and gave birth to the modern world.

Professor Baldwin Brown, thirteen years since, published two volumes under the general title of *The Arts in Early England*,* respectively dealing with "The Life of Saxon England in its relation to the Arts" and "Ecclesiastical Architecture in England from the Conversion of the Saxons to the Norman Conquest." These books have made study, on the lines just suggested, more possible by gathering and discussing the architectural remains of the whole period, together with prefatory chapters, of more general interest, on the growth of civil life in Britain and its close relation to the pervading influence of the developing Christian institutions. The author we knew possessed breadth of scholarship and an almost architectural practicality of outlook; he manifests always a frank enthusiasm, and by his lucid style of exposition we were easily introduced to a widened field of archaeological investigation and speculation, with enticing distances that were difficult to limit.

Since the publication of these first volumes Professor Baldwin Brown undertook a course of Rhind Lectures on the Art of the Period of the Teutonic Migrations. The lectures were published in 1910 and reviewed in this JOURNAL † by Mr. Paul Waterhouse. From this wider study the author comes back to *The Arts in Early England* with "an enlarged view of the work remaining to be done and with a considerable increase of apparatus" that not unnaturally tends, if not to embarrass, considerably to extend the subject.

Two further volumes dealing with Saxon art and industry during the Pagan period, on a scale much increased in detail, have now been added by the same author; ‡ the Christian period remaining to be

* London. John Murray. 1903.

† JOURNAL R.I.B.A., Vol. XVIII. Third Series, p. 384.

‡ *The Arts in Early England—Saxon Art and Industry in the Pagan Period.* By G. Baldwin Brown, M.A., Watson Gordon Professor of Fine Art in the University of Edinburgh. Vols. III. and IV., 2ls. each net. London, John Murray. 1915.

dealt with; the series promising to become a complete exposition of the subject of pre-Norman art in Britain. The present instalment, however, is confined to the decorative arts of the two and a half centuries of migration and settlement between the Roman evacuation and Gregory's mission of Augustine in 597. Out of this unsettled epoch, generally supposed to be entirely barren of practical artistic interest, is produced a large assortment of antiquarian material; principally the contents of pagan cemeteries, which furnish costume, weapons, pottery, and jewellery, as well as the coinage which neutrally connects the Pagan and Christian eras. The volumes are abundantly illustrated by photographs of over 800 objects and coloured photographic plates taken by the author, besides some line illustrations and useful maps; they are alike beyond criticism in style, form and artistic interest.

The extent and quality of these gleanings of the pre-Christian Saxon period form a preface to the relatively rich fields of later Saxon art that remain in the carvings, illuminations and decorative objects of the four and a half centuries that elapsed before the Norman invasion. This important term, more than equal to that of the whole development and decay of English Mediæval art, still awaits a similar analysis and criticism to complete an integral chapter in the History of the Arts in England.

The word "Saxon" was used in the oldest times, as ever since, by the Celtic to denominate their Teutonic neighbours. The Angle of the north is as much a Saxon to the Scottish Highlander as is the West Saxon inhabitant of Wessex to the Welsh. The terms "Jute," "Saxon" and "Angle" are used by Bede himself so loosely that it would be wrong to treat them as absolute racial distinctions; however, the terms "England" and "English" go back to times when the predominant people in Britain were not any of the Angles but the Saxons of Wessex. Professor Baldwin Brown concludes that differences of race within the island where the migration had been effected were of small account, as it is thought that by the end of the fifth century all maritime raiders were commonly called Saxons, and warns the reader against attaching too definite an ethnic meaning to the names of the migration period.

The archæological evidence connected with the migrations and settlements of the Anglo-Saxons in the Thames basin, of the Jutes in Sussex, Kent and Hampshire, and of the Angles on the East Coast, is discussed and elucidated by maps giving suggested routes with a natural similarity to modern war plans. The effect is that early objects found in the North have affinities with Scandinavian and North German products; similar articles found south of the Thames find their prototypes in Romanised lands along the Rhine and in Gaul.

The important question, what became of the Romano-British population and its civilisation and art, is referred to as having never been satisfactorily settled; the old theory of extermination has not really been superseded, though presumably the invaded were more numerous than the invaders and certainly more civilised. The cemeteries show some evidence of a return to conditions prior to the Romano-British period, as the Anglo-Saxons used the earlier Celtic cemeteries of the Bronze Age rather than the urban Romanised ones. The historic connections with Celtic, Classic and Oriental art are exhibited. Celtic art in Britain which had been put out of existence in Europe by the Romans survived, though the influences of Rome across the northern borders of the Empire count for much; for when the older fashions of Gaul were superseded by Rome the art which flourished until Julius Cæsar took refuge across the Channel in the north and west of the British Isles, and remained to blossom afresh in the carving, metalwork and illumination of the seventh and eighth centuries. The Oriental movement from the south-east is much in evidence in the Teutonic art of the migration period from the third up to the eighth century; while in Early Christian art there was always room for the influence of the Byzantine Church. When the Christian period of Anglo-Saxon culture opens, the relations between the Germanic art of the immigrants and the late Celtic of the indigenous population of the west and north become intimate and complex; our national spirit should be stimulated by the reflection that the Church everywhere, except in Celtic lands, rested on Roman civilisation.

The unsolved problem of London history, whether it can claim the wonderful attainment of well-

nigh two thousand years' continuous civic existence, is one that hinges within the period of this survey. Professor Haverfield's Address to the Classical Association, 1912, is cited to the effect that London ceased to be for a while, that nothing has been found to suggest that Roman Britons dwelt there long after A.D. 400, and that no discoveries suggest that the English occupied it till long after A.D. 500, the site lying empty. The late Sir Laurence Gomme, a singular example of the cultivation of learned enthusiasms akin to the great public office which he held as Clerk of the London County Council, not only in pious duty but with anxious acumen maintained unflinchingly the continuous existence of the city. He pointed to many apparently Roman survivals in institutions and accepted the view of a West Saxon invasion from the south through Hampshire, on the ground that the invaders, being prevented by London, did not sail up the Thames as they did the Severn, Tyne and lesser rivers, but spread far inland from the South Coast. Professor Baldwin Brown asks if a hostile London would have been tolerated in the south-east, and quotes from the Anglo-Saxon Chronicle, 456-7, after the battle of Crayford (between Hengist and the Britons), on the borders of the territorium of the Roman city, "the Britons left Kentland and in muckle awe fled to London-burgh," but no siege or assault is recorded. Gomme's view as to this is that the Anglo-Saxons mastered London but did not conquer it, Londoners living in Roman houses until the days of Alfred, and that remains have been found under no fewer than 56 streets. The difficulty, a serious one, remains that the streets of the mediæval and modern city do not run on Roman lines, but across the sites of houses, indicating ruin and rebuilding probably of a completely drastic nature. Professor Baldwin Brown believes that the Saxons probably raided and sacked London, treating it as Strassburg, Worms and Mainz (is there prophetic vengeance as well as pristine habit on this page) and established themselves in the suburbs: to wit the Saxon name-endings on our "General" omnibuses, "-ington," "-ey," "-end" and "-wich," a condition which could not co-exist with a central town still potentially hostile. Here the controversy on the whole remains until another gallant picks up the lamented Sir Laurence's well-tried tilting lance.

The first volume of the series on "The Life of Saxon England" dealt with Christianity in the British Isles of Roman civilisation as rooted and flourishing, and we may add surviving, where no Imperial organisation had been planted, as in Wales and Ireland; but in the main in England it was swept away by the Teutonic invasion, where its revival and ultimate place still involve controversies of practical import. The bulk of the matter dealt with in the two volumes under review is furnished by the contents of earlier cemeteries, and is due to the Pagan practice of placing objects beside the body or its ashes in sepulture, a custom which gradually passed out of use in the seventh century. Tomb furniture is essentially Pagan, based on traditional ideas about the life beyond the grave that have no place in the scheme of the Christian, who brings nothing into the world and will carry nothing out, the inclusion with Priests of a chalice or of the warrior's arms over his sarcophagus not invalidating the general rule.

As to orientation, Professor Baldwin Brown says "that, play with the notion as we may, orientation is just as Pagan an institution as tomb furniture, and only differs from it in that the Christians took it to themselves and made it a piece of ritual orthodoxy." The history of the Christian graveyard begins with a breach of the supposed inviolable rule for the cemetery of the seventh and eighth centuries at Hartlepool. The first seat of Hilda of Whitby has about a dozen bodies with incised crosses on the memorial slabs laid from north to south.

"From the first settlement down to about 700 these cemeteries were in use and honour, but from that date till about 1700 they passed not only out of use but out of memory almost as completely as did the Roman catacombs." The cause of their passing out of use was the establishment of the churchyard, the early history of which is obscure, the first Christian burying grounds being attached to monastic churches. It was only gradually that the temenos or enclosed area around the country church became the effective place of burial for the local folk. Pagan cemeteries were certainly in use even for the burial of Christians during the seventh century, as crosses obviously and professedly Christian and

worn as pendants have come to light. On the other hand, there are a few significant instances of Pagan burial in churchyards, perhaps of one of Queen Bertha's ladies of honour in St. Martin's Cemetery, Canterbury, with a Roman gem and gold coins.

The Anglo-Saxon tomb furniture, dating from before the great advance of learning led by Northumbria in the seventh century, the effect of which is to be part of the author's culminating promised study, centres in interest around the fibulæ, brooches or buckles. These small articles in skilful hands yield up the secrets not only of their use but of their users and much more. Professor Baldwin Brown devotes the greater part of three chapters and many illustrations to these little objects, of which he thinks it is hardly too much to say that the whole subject of Teutonic decorative art can be illustrated from what appears on the fibulæ. The patterns are described and so comprehensively illustrated that the reader is delivered from the awe that is inspired by such a title as "the morphology of the fibula," with the suggested subdivisions of motives of design as linear, floral, zoomorphic, and anthromorphic. The analysis of the technical processes which follows includes engraving, incising or tracing lines; stamping patterns on metal or clay; beating up or punching down by the repoussé process; casting in metal and chasing, sometimes facetting; inlaying one metal in another; soldering one metal to another, (a) filigree, (b) granulated, (c) imitations of these; overlaying with vitreous pastes; inserting stones in compartments or cavities.

The Kentish inlaid jewellery of the early tombs is described as a tradition not brought from the north but which came from the east, along frequented routes by the valleys of the Danube and the Rhine, linking the extreme north-west of Teutonised Europe with the furthestmost European east where Greek civilisation was touched.

In the second volume, on Saxon Ecclesiastical Architecture, the affinity of buildings was set out in certain typical arrangements, such as the treatment of the west end as well as details, with that of Austrasian Germany, the district east of the Rhine, rather than with that of Neustria and the Gaulish lands. In the pre-Christian decorative objects are discerned similar affinities that lie east rather than south or west, and the dim sources of Gothic art are thus traced from the Jutes in Kent across Hungary to the ancient Dacia of Roumania. As to the resulting work, we are told that after the start had been given from the older Romanised culture of the Continent our workmen go their own way to original design and technique.

The art which, however barely, extended over the largest, richest and most populous districts of England for over six centuries, needs to be judged by more than the sparse remains of an architecture which exhibits but little power. There is much in the decorative work now brought under review to illustrate Professor Baldwin Brown's opinion that the old craftsman would have no reason to fear the competition of his modern successor. It is often tactful in design and refined in execution, justifying the enthusiasm displayed for the remarkable jewellery. The author is an expert on the morphology of the fibula, illustrated best by the frontispiece to Vol. III. of the brooch now at Liverpool, found at Kingston, near Canterbury. This is not a sporadic example, and it serves as a good text to the relation of Saxon art as a whole to the European work of the fifth and sixth centuries. Collateral examples from contemporary bronzes, the coinage, and pottery are provided, and we are prepared steadily for the suggestion that the strongest side of these decorative objects is in their technical achievement rather than in design.

The following, however, is the verdict on the early coinage of the Anglo-Saxons: "In numismatic history, as a whole, beauty in the highest sense is perhaps only represented in the coins of the Classic and the Gothic periods and in some Renaissance pieces, but beauty that is a matter more of feeling and suggestion than of perfection of form certainly belongs to sceattas" (pronounced *shattas*, the small Saxon silver coins, smaller than threepenny-bits and thicker). "The highest merit of the coins, however, resides in the freshness and variety of the devices, which represent the Anglo-Saxon artist of the seventh century in a most favourable light, and make us long for a little of his animation and fancy

to enliven the inane and spiritless devices of our modern British coins and postage stamps. The execution of the sceat designs we may characterise, if we will, as 'rude,' but this is really a term of praise when we compare the boldness and accent in their handling with the thin machine-like regularity of the orthodox productions of to-day."

Enamelling and inlaid work are illustrated as essentially non-classical, their origin being interestingly described as outside the classical periphery which is traced from Egypt *circa* B.C. 2000, Mycene, Persia, into Iranian Russia, at dates prior to the development of Classical civilisation, touching this periphery at certain times and places, even practised to a limited extent by Greeks and Romans; but always remaining barbaric until Byzantium about the sixth or seventh century adopted and made her own one of the many processes of enamel. Both enamel and incrustation or inlaying remained through the Middle Ages characteristic artistic processes of the West, the Goths achieving in this branch the most splendid results that art ever produced.

Thus far afield, with enthusiasm supported by graphic and descriptive illustration, Professor Baldwin Brown enlarges our view and lays his net. The wide range justifies his conclusions sufficiently for the stimulating of the study of the artistic motive and technique of our Teutonic ancestors. In the England of the fifth and sixth centuries this decorative art is primitive, Pagan and pre-Christian, the art of the Migration Period, of scarcely settled tribes and districts, and it originated outside the island, with parentage and affinities on the Continent. Yet this Saxon art, which is neither Celtic nor Romanised but a sub-division of Germanic art, belongs to us; he discerns that we have a national autonomy in all, which is not merely copyist or dependent, that it is no ape of Merovingian fashions, but is all along "barbaric" and dignified.

This subject that at first appeared barren of connection and unsuggestive to the artist, dealt with by historical and critical analysis, reveals interesting and practical aspects. The author's sympathy and touch with the environment and intellectual processes, conscious or sub-conscious, of the designer and workman, can be measured by the three tests or standards of artistic merit that he suggests—first, originality; second, intrinsic quality of design; third, workmanlike execution. Though the archaeological outlook is historical, the artistic position of the Anglo-Saxons is the subject of the work, and the unexpected supply of decorative objects, when grouped, has a certain stimulus which justifies the claim to this standpoint.

Archæological discussion of this character justifies itself by the apt quotation from Dr. Johnson: "Mankind rises in the scale of being when the past and future claim an importance in his mind above that of the passing hour." The designer will appreciate the ancestry of idea and technique so skilfully suggested and elucidated by Professor Baldwin Brown, giving interest and practical value to such an unpromising subject as a survey of Pagan Saxon cemeteries.

THE CATAclysm—AND AFTER.

By Captain R. BURNS DICK, R.G.A. [F.].

Presidential Address to the Northern Architectural Association at the Opening Meeting, 15th November, 1916.

GENTLEMEN,—For the third consecutive year I am privileged to take the chair at the opening meeting of the Winter Session of this Association as its President. This unusual fact is not one on which I am permitted to congratulate myself; it is merely one of the smaller effects of the universal upheaval that has changed the whole course of events in our national life. Whither leads the new movement is more than can yet be surmised, so perforce are we compelled to mark time till the way is clear.

I am fortunate in being able to attend this the first General Meeting of the Session, and I feel that much will

not be expected of me in the way of a Presidential Address, or, rather, that you will be very indulgent to me. I shall confine myself practically to one thought, and that the influence of present events on the citizen's attitude towards the city beautiful. As to the work of the Association, there is little to record during the past year. A certain amount of time and thought has of necessity been devoted to the affairs of the Society, but though nominally your President I have taken no part in the work owing to my military duties. Your Vice-President, Mr. Errington, who would in the ordinary course have occupied the chair to-day, together with our capable Hon. Secretary, Mr. Hicks, and the Council, have done all that was necessary and possible under existing conditions.

Though the war has produced the disastrous effects for our profession that were to be expected from the curtailment and uncertainty imposed on all peaceful industry, it has

unfortunately been found necessary to put a stop to much of the work that was left to us, in order that the output of munitions might not be interfered with. It is something, however, to know that every case is properly investigated before permission to carry out work is withheld, and from the knowledge I have of those controlling the investigation, I am sure everything is being done to minimise the burden put upon us.

I have mournfully to record that death, the uninvited and never welcome guest, has descended upon us as never before. A Past President in the person of Mr. J. W. Taylor has been taken from us, leaving behind him the memory of an earnest worker for the welfare of the N.A.A., whose long roll of members has been enriched by his name. Mr. J. W. Dyson has also passed away, depriving us of a valued and useful member. The Society is poorer by such a loss, and those of us who knew these two gentlemen will much miss the pleasant personal associations we had with them. But they have lived long and useful careers which in the ordinary course could not have been much further extended. It is quite otherwise with those others whose names you have heard read from the Roll of Honour, who at the call of country have willingly laid down their lives on the threshold of the careers they had envisaged and on which they were entering with high hopes and an ardour that might well have yielded so much that was beautiful and useful. We cannot accept the loss of these, the nation's gallant sons, out down in the flower of their youth, with the resignation that follows on the death of those whose course is wellnigh run. Our hearts go out to the parents who have given to the State a beloved offspring, and we mourn with them the loss of long cherished hopes for a future, alas! arrested for ever. Admirable is the courage of those bereaved, who must feel some consolation in the belief that this supreme sacrifice is of more value to the future of the State than the longest career of a normal life. As Mr. Ernest Newton, P.R.I.B.A., wisely pointed out in his Presidential Address, the future will be determined for us by the men who have done the fighting, and whatever may be that future—and I think it will be great—it will have been made possible by the sacrifice of those who have laid down their lives at their country's call.

Gentlemen, terrible as seems the price we are paying, I have a full belief that posterity will not consider it too great for the results achieved. I believe that the changes which will be wrought by this conflict in every domain of our national life will be vaster and more far-reaching than any of us have any conception of. I will not venture to predict what will be the nature of these changes so far as they affect the sphere of work with which we as architects are concerned; all I would do is to counsel such an attitude of mind on the part of those who are compelled to stand clear of the actual conflict of arms as will respond readily to the new influences that will soon commence to operate—an attitude of mind such as will anticipate the needs of the new life and, freed from all prejudice and narrowness, will be ready to co-operate with the new desires and aspirations that will most certainly express themselves.

In my last Address I advocated the establishment of what I called "Foresight Committees," and I still think much might be accomplished in the meantime by each of us so constituting himself, if only as a hobby in his spare time. I must also reiterate the views I expressed as to the tremendous effect that the new methods of warfare will undoubtedly have upon the actual form and construction of buildings and the laying out of residential and industrial

areas. They will be as far-reaching as was the general adoption of new principles of construction in the past, such as the dome and the pointed arch, or as steel construction in the present. I am convinced, though none of us are likely to see the particular "set" it will assume, that this is the dawn of as distinctive an era in architecture and the arts as any of the well-defined periods in history.

The design and construction of habitations and the position and arrangement of mediæval centres of life were profoundly influenced by the prevailing methods of warfare, just as the succeeding period, the *soi-disant* Renaissance, was markedly affected by the invention of artillery, which aided in destroying those conditions that gave rise to moated strongholds, castles on craggy eminences, and the old walled cities of the Middle Ages. After four or five centuries of freedom from direct military influence, so far as the life and growth of our towns and cities are concerned, I believe we are again returning to a period when the effects of man's fighting propensities will once more show themselves in our habitations and mode of life, and a new phase in architecture will evolve.

Now, while this means that the "Renaissance" has practically run its course, I do not mean to suggest that it will suddenly cease. It will simply be gradually crowded out, as something tangible and decided and more in conformity with the changing conditions takes hold. In other words, the usual transition which separates every period from that succeeding is now commencing. Whilst I am emphasising the part that the developing science of warfare will play in this dawning new era, I do not wish to suggest that that is the only factor in the change that is coming, though I believe this war to be directly responsible for launching the new order of things; for I believe it will materially change the citizen's outlook in a way nothing else could have done.

One of the things to which the sordidness of the surroundings and atmosphere of industrial life may be largely attributed is the inability of the people themselves to see that there is a solid and substantial return to be obtained from expenditure on spacious, healthy, and beautiful surroundings in the centres where they work and live. Its practical and remunerative value, to put it on no higher basis, has been clearly demonstrated by such far-seeing men as the founder of Port Sunlight, where there is so much to delight the senses in the beautiful homes erected under his personal ægis, and where they and the character and happiness of the workers are in such contrast to the habitations and lives of the artisans in the vast majority of our industrial centres.

There are many far-seeing people who have been laboriously working to remove this reproach on our national life, and the result is being seen in various directions in the springing up of more or less satisfactory garden suburbs, founded on practical lines and not on an unstable philanthropic basis. But it is dishearteningly slow work, because it is being practically forced by the few enlightened on an almost indifferent community. Until the people themselves realise the possibility of the infinitely increased happiness awaiting them in this direction it will never become general. The degree of beauty of a city is an indication of the enlightenment of its people. So long as the people remain indifferent to the effects of material environment on character so long will it be impossible to them to create an entirely beautiful city.

To point the moral, I have only to take our own city as an example. We have more than once heard a city father

with pardonable pride refer to this as "no mean city." A no mean city indeed! Whilst that remark points to the many-sidedness of the city's life, its distinguished citizens, its position as a centre of culture and learning, and its great industrial position, it also visualises the imposing thoroughfares and buildings of which the city may justly boast. Now, take away the work of that far-seeing citizen, Grainger—work that owes its nobility of form to Dobson, his equally great architect—and what remains of our boasted city? How much is there left of the modern city of which one would boast? Yet eighty years have elapsed since Grainger's fine work came into being.

Ross, in his *Views in Newcastle*, published in 1841, thus refers to Grainger's improvements: "Our canny toon, 'the Coal-hole of the North,' now stands, through his exertions, as a proudly pre-eminent for architectural beauty as it has successively done for military glory, for monastic learning and piety, and for mercantile enterprise and respectability. May that enterprise continue to reap and secure the advantages justly its due, while the Tyne shall roll its floods, laden with the products of art and of commerce, to the ocean!" and quotes Milton:—

Anon out of the earth a fabric huge
Rose like an exhalation,
Built like a temple, where pilasters round
Were set, and Doric pillars overlaid
With golden architrave; nor did there want
Cornice or frieze, with bossy sculptures graven

The hasty multitude
Admiring entered ; and the work some praise,
And some the Architect.

Well has the "enterprise" justified the pious hopes of Ross. The curious thing is that while praise is always forthcoming from those who are responsible for the development of the city, Grainger's brilliant example seems to be without influence in their "enterprises."

Since then city improvements, some on a large scale, have had to be undertaken to meet the growing traffic and business demands; great opportunities have offered themselves to continue the work of Grainger; and a people prosperous enough to bear the burden has not been wanting. With what results? With all our boasting of our fine streets, there has not been, since his (Grainger's) time, one single instance of the many thoroughfare improvements and extensions undertaken having in any way approached in spaciousness and dignity those constructed three-quarters of a century ago, when failure to foresee the enormous growth and nature of the traffic that would crowd our streets might have been considered excusable. Our most recent and most important improvement, offering splendid possibilities for perpetuating the wisdom and foresight of that bygone city-builder of whom we are so proud—and for showing that the future necessities and credit of the city are safe in our hands—has resulted in a complete failure to realise the responsibilities that are placed upon us as an advanced community, and is indeed pitiable. I refer, of course, to the extension of Market Street.

Now it must not be inferred that the city is deficient in the intelligence and civic pride and technical and artistic skill necessary to the worthy carrying out of such a project, for there were, and are still, men on the Council who realised the possibilities and desired to see them taken advantage of, but who were not strong enough to prevail against the people whose indifference and short-sightedness were reflected by their representatives on the Council.

It is the people themselves who are responsible, and it is our business and the business of those who are devoting time to the study of better housing and town planning, to foster and encourage an appreciation of the moral and material benefit that will accrue from an improvement in those vital matters of civic life.

But this, as I have said, is laborious in the extreme. Nothing but a cataclysm would have the desired effect. Well, gentlemen, the cataclysm is here, and is in process of working that change in the perception and outlook of the people themselves, from which great things can confidently be looked for. Think what is taking place just now with us : something that has not occurred since the distant past when people were fierce, migratory, and elementary in their civilisation : something that history will record as very wonderful and far-reaching in its results—in fact, something that ushered in as distinctive a period in the life and arts of our nation as any that can be recorded in our history. A whole nation has shaken itself free from the peaceful pursuits and traditions of centuries ; its whole manhood that counts is for the first time in its history leaving its shores to stem the threatening flood of barbarism that was descending on it and its peaceful neighbours, is penetrating new worlds, and is coming under the influence of new friends and new conditions undreamt of. Three years ago the imagination would have reeled at the suggestion of half the truth of to-day.

What is it that causes the narrow, parochial, and unimaginative outlook from which the people in their lives and habitations suffer? It is that the majority are tied and fettered to their particular circumscribed world, in ignorance of a wider and nobler existence of thought and action, fostered in the insular belief that Britain leads the way in everything. We know, at any rate so far as the Arts are concerned, that to cut ourselves off from contact with other peoples would not give us a leading position. I do not believe that in any phase of life a nation can isolate itself without deterioration. Is not our greatness largely due to the roving, restless spirit of the great pioneers of our race?

By the nature of things, that spirit has not been given play amongst our industrial millions, who are now more responsible than in the past for their own government ; hence that narrowness of outlook which is reflected in our towns and cities. But can this wonderful thing that is happening leave things where they were ? Can you take millions of men and women—the whole nation in fact—and such a nation, nay, a world-scattered Empire—from the narrow daily round from which few can escape under ordinary conditions, train them to a new existence, where unsuspected traits of character reveal themselves ; lead them into foreign countries, which they for the most part would never have known, there to come in contact with peoples of different ways and thoughts not inferior to their own, there to see new cities and new modes of life, that cannot fail to have some message for them ; there in fierce contest to defend the right to develop in the way they think best for themselves ?—I say, can you do this with the people, those who will one day dictate the policy of our civic life and mould the external appearances of our towns and cities, and expect them to remain unchanged, uninfluenced by the tremendous experiences through which they have passed as never before in our history ? It is unthinkable. Remember, it is the whole manhood of the nation, not one class, but every social stratum and grade of which the nation consists, a whole nation's intelli-

gence that is under treatment. It is not even confined to the manhood of the nation; women as never before are playing an heroic part in spheres that hitherto they have not entered, and their influence cannot fail to be very marked in the work of the future. It is so tremendous and overwhelming a thing that is upon us that few have any conception of what it portends. The subject is a vast and interesting one with many phases, but one which I cannot pursue further, and I will conclude these few immature thoughts by recommending those who have the leisure—and who remaining behind in the architectural world has not the leisure?—to devote some consideration to those inevitable changes that will be demanded in the future by the more thoughtful and newly enlightened citizen in every rank of life.

Much, I am sure, will be expected of our profession in the way of interpreting their aspirations and of giving them a worthy, concrete expression; and I am convinced that the hitherto ill fostered Arts will, with a widened intelligence and outlook, take their proper place amongst the higher things that will be desired of life. A people gets no more nor no less than it deserves. Well, I believe our people will deserve better things, and that a higher standard of attainment will be demanded of architects than in the past, and only those of us who are worthy of it may hope for success in that Golden Age to come.

IMPERIAL PALACE: SCHEME FOR IMPROVING CHARING CROSS.

By EDWIN T. HALL [F.].

TO the various schemes for the improvement of the Charing Cross area which have appeared in the JOURNAL I am venturing to add one which I prepared some months ago and which was fully described under the above heading in the *Evening Standard* last October.

There are three aspects of the case which are in the public interest—namely, (1) the necessity for relieving the traffic; (2) the desirability of getting an adequate memorial to the Peace wrought by the Empire; and (3) the great opportunity of beautifying London. How these three points can be dealt with will be seen on the subjoined plan. Such an opportunity for improving London has not arisen since the construction of the Victoria Embankment.

(1) *From the traffic point of view*, there is at present no road bridge from the Embankment between Westminster Bridge and Blackfriars. If such a bridge were made at Charing Cross, not only would it be a great convenience to road traffic, but it would open up the Surrey side of the river for building. The Surrey embankment at present constructed in front of the County Hall could then be continued to Waterloo Bridge, and later on, we hope, to Blackfriars. This would be the only bridge between the Tower and Lambeth with which the actual Surrey riverside could be connected, as all the others are at too high a level. I propose to make the bridge five feet higher than Blackfriars and Westminster, and this must be necessarily more than adequate for the

river traffic. The approaches would be by easy gradients, all of which have been worked out. The present Embankment wall would not be altered, and the existing tram and footways would remain on the level, exactly as they are now, passing under the bridge approach.

The congestion in the Strand is notorious, and this evil is likely to increase. When Charing Cross Station is removed Villiers Street should be widened to make it into an avenue of the same width as Northumberland Avenue, and Charing Cross Road should then be continued through to it. All traffic to the new bridge from the west would then pass through Northumberland Avenue; from the north through Charing Cross Road and Villiers Avenue; and from the City through Queen Victoria Street and the Embankment. The site of the bridge is identical with that of the railway bridge. It is square to the river currents. Any other position would interfere with the stately symmetry of the Embankment design between Westminster and Waterloo Bridges.

The new South Eastern Imperial Station and Hotel are shown to occupy the whole frontage between the Imperial Bridge and Waterloo Bridge. The advantage of this position is that the new station could be completed before any interference takes place with the present railway bridge and Charing Cross Station. Access to the station, which is twice the size of Charing Cross, is from both the bridges. The prospect from the Hotel would be superior to that from any other hotel in London.

(2) *From the point of view of the Peace Memorial*, I suggest that a bridge alone is inadequate for this purpose except as an approach to a building which shall symbolise the unity of the Empire. It is generally conceded that the Overseas Dominions will in future sit in Council with the Home Government to deal with Imperial questions, and I suggest a palace to house the great Council, to accommodate the staffs of the High Commissioners, and to contain suites of State apartments for the use of the Prime Ministers of the Dominions. I place this palace between Northumberland and Villiers Avenues, in close touch with all the Government offices. The Imperial Bridge and Palace would thus become part of one architectural composition. Between the bridge and the Palace I propose a Square or "Grand Place," about three acres in extent, flanked by the gardens of the Embankment, in principle like the Place de la Concorde or that in front of the Trocadéro in Paris. On the bridge it is proposed that there should be sculptured monuments to the Navy, in the Great Square to the Army and our Allies, and on the Imperial Palace to the triumphs of Peace. The site for this palace is unquestionably the finest in London, and it would strike a note of Imperialism which would appeal to the whole Empire.

(3) *From the point of view of beautifying London*, we have nothing here on our river comparable with the open spaces of Paris, and if a scheme somewhat on the lines suggested were carried out, one can

readily picture the magnificence of the vista that would be opened up, focussing as it would on this Imperial centre. When it comes to the question of the actual design for the bridge and buildings, I think there should be an architectural competition open to the whole of the British Empire.

The Imperial Avenue from the Surrey side of the bridge follows and absorbs the railway viaduct and the adjacent road to Waterloo Road, passing the foot of the carriage approach to Waterloo Station, and so facilitating traffic between it and the West End.

The cost of the whole scheme would probably be equal to about one day's war expenditure. Of this a large part would be recouped by the site values for building; all the money would be spent within the country; it would give employment to thousands of men returned from the war; and in the end there would be value to show for the expenditure in permanent improvements of great dignity, beauty and utility.

SHEFFIELD—A WORLD CITY.*

By W. S. PURCHON, M.A. [A.],

Lecturer in Architecture at the University of Sheffield.

"Sheffield should become a World City."—"Observer," *Sheffield Daily Telegraph*, 12th August 1916.

ARTHUR STEELE left Sheffield with a number of other young men in the autumn of the year 1914. After the War he visited England for a few days, and then decided to try his fortune as a farmer in a somewhat remote part of Canada. Here he settled down, seeing little or nothing of city life, until the summer of 1950, when a letter from an old Sheffield friend makes him long for the scenes of his childhood, to which, being now of independent means, he at once returns.

The journey over at last, the train draws up at a platform in a railway station which reminds him of some he has seen in passing through America, a station which startles him almost as much as the groups of people of various nationalities he sees about him.

Leaving the station with his friend, he walks down a broad road and notes with interest the fine business premises on each side, and straight ahead the Town Hall, which, he discovers a little later, is grouped with other public buildings of a similar character, bounding

an open space of some considerable dimensions, and containing in its centre a restful formal garden. From this space several broad roads branch out, and going a short distance down three or four of them he finds in each case a somewhat similar open space. The first he investigates is the main shopping centre, containing, he thinks, a somewhat excessive proportion of bookshops, and the bookshops themselves exhibiting a remarkable number of books whose titles, being in foreign tongues, he is unable to read. The second road brings the two friends to the central educational establishments, again grouped around a great open space. The Public Library draws from Steele the comment, "We hadn't these advantages when I was a boy."

Outside the Art Gallery a neatly lettered sign draws attention to a Loan Collection of Modern French Sculpture. Great hotels and restaurants, many of them bearing strangely foreign signs, greet his eye presently, but the climax comes when he reaches what seems to him a superior form of Leicester Square.

One of the theatres announces a Russian opera, which his friend assures him has just taken Sheffield by storm. "They made the mistake of trying it in London first, as they used to do in the old days, but it didn't pay." At this, Steele asks to be taken to the East End of the City, hoping that there he will feel more at home, but he finds that the East has changed no less strikingly than the centre. The little houses and shops have all gone, and most of the streets and roads have disappeared. In their place he finds works—nothing but works—and even the works are vastly different from those he remembered. In the old days he had been employed by one of Sheffield's great steel firms, and his friend, who had worked with him and is now a manager, shows him round the new place, drawing attention, with some little pride, to the stately block of offices, the great canteens, the perfectly equipped ambulance rooms, the lavatory block containing washing sprays, slipper and shower baths, and the rooms in which the workers leave their working clothes before bathing and changing into their other garments. The orderliness of the works came as a complete surprise—nothing seemed haphazard, all the parts seemed to fit harmoniously together to form a complete whole. And in the waiting-rooms and lobbies, more foreigners, Oriental and Occidental.

Leaving the works, a swift, silent motor-bus takes them out to a charming garden suburb—the real thing, not a collection of traveller's samples. His friend explains to Steele that there are several of these suburbs, each with its own shopping centre, its schools, its churches, library, swimming-bath, recreation rooms, and playing fields.

"But how did Sheffield manage to change like this inside twenty-five years?" Steele asks his friend as they walk on the moors during the evening.

"Well," says the friend, "it was something like this. As the war was drawing to a close Sheffield realised that great expansion and great changes were inevitable, and after a lot of discussion it was decided

* This article, which is reprinted with some slight alterations from the *Sheffield Daily Telegraph* of 5th September 1916, is not intended as a serious contribution to the literature of Town Planning, but rather as an attempt to stimulate the imagination of Sheffield's citizens. As the editor of the *Sheffield Daily Telegraph* writes in dealing with this effort "an essential preliminary is a transformation in the aspirations, hopes, ideals, thoughts and habits of the citizens at large." There are, doubtless, many cities in which the question of Town Planning will become of great importance during the next few years; and this article is reprinted in the hope that it may induce others, better qualified for the task, to take up the work of interesting the general public in the Arts of Architecture and Town Planning.—W. S. P.

to lay down a complete plan of the Sheffield of the future. There was a sort of prize competition for the best plan, and when this was finally approved by a committee of experts, we stuck to it, and every time new buildings were put up or new roads made they had to fit in with the plan. It was all a bit scrappy for a few years, but the foreign trade of Sheffield was developing by leaps and bounds (thanks largely to another committee of experts), and it was surprising how rapidly the gaps filled up and the scheme developed. We had learnt to scrap out-of-date machinery years before, and we started to scrap out-of-date, inefficient roads and buildings.

"Of course, they gave the East End up to the works, and put on services of motor 'buses to these new suburbs, besides the inner and outer circle services. Canteens had been started during the war at several of the works, and as the workers began to live further away more canteens had to be built; and then came the cloak-rooms and the shower-baths and all the rest of it.

"Everybody got hold of the idea of 'The Sheffield of the Future,' as we used to say, and we gradually found that the new ideas, which for long we had looked upon as vain dreams, were not only more pleasant than the old, but that they actually paid. Why, for one thing, only a small one perhaps, half of Yorkshire and most of Derbyshire and Lincolnshire come to Sheffield to shop instead of going to London.

"All the worst parts of the city got pulled down first, of course, and soon there wasn't a back-to-back house left. Sheffield became a lot healthier, the amount of sickness among the workers fell rapidly, and the children one saw about began to look sounder and stronger."

"Yes," said Steele, "I think I can quite see all that, but what about the smoke? It used to be pretty bad before I left, and there doesn't seem to be any worth mentioning now."

"Oh, smoke, yes; there was a great deal of excitement about that. A young fellow at the University it was who took that up. We used to say we couldn't make steel without smoke, but he said he could make better steel without than we could with, and we let him try. That was about 1920, when we were just getting into the habit of trying new things. The Government granted £10,000 for his experiments, and they would have been cheap at ten times that. I remember I had a bet on it. I bet he couldn't do it, and I lost a fiver. That helped to get me into the new way of thinking. We used to say, 'What was good enough for my father is good enough for me,' and we altered that to 'What was good enough for my father won't be good enough for my son.'"

"Did all the big cities do the same as Sheffield?"

"No, most of them said, 'Let's wait and see what things are like after the war'; they got left behind badly. Luckily we said 'The committees won't cost much, and the schemes won't cost much, and if the boom comes we shall be ready for it.'"

CORRESPONDENCE.

"The Anarchy in Architectural Design."

To the Editor, JOURNAL R.I.B.A.—

SIR,—When supporting the vote of thanks to the President for his admirable Address, Professor Lethaby, in his remarks about getting round "the difficult corner of conflicting styles, &c.," faintly touched upon a question to which it would be well for the Institute to give further consideration. Doubtless a majority of architects think they are sufficiently employed in grinding with reasonable diligence the same old axes as they have been in the habit of grinding, and any suggestion as to the necessity for a sounder philosophic basis for our art—that is what it amounts to—would be considered by them as a visionary sort of thing which does not matter.

There must be, however, among those of our members who have at heart the disorderly condition of architecture in this country, a large number who hold that the point raised by Professor Lethaby—and many other kindred points—should occupy the attention of the Institute more than they have done in the past. Never in the history of architecture, during the past ten thousand years or more, has there appeared such a hybrid jumble of design, such a blind groping after right method as has been seen in England during the last hundred years or so.

Up to that time art was all of a piece—or at any rate it is sufficiently accurate for the present purpose so to consider it. Since then, however, architects have not been able to handle, much less weave into an orderly system of thought, the plethora of conflicting ideas and tendencies which have arisen. This somewhat startling fact appears to be accepted by the majority of architects not as a catastrophe but as part of the inevitable scheme of things, about which we must not make much pother, or we should be regarded as cranks, to the detriment of our pockets.

This attitude is not merely thoughtless and mistaken, it is more serious; as Professor Lethaby said, "It is a question of survival"; for, although he used these words more especially with reference to the "advertising plague," I suggest he would quite as heartily apply them to the "internal anarchy of style from which we suffer."

Investigations into the fundamental causes leading to the present social condition of the country have already been made, and are being made, from the standpoint of economics, &c. This is to be expected, as the economic cause precedes æsthetic reaction; but the time has surely arrived when we should strive to obtain a more precise mental articulation than we have hitherto had as to the fundamental causes which have led to our present æsthetic condition, seeing that these causes present themselves as a fairly complete chain dating back to the seventeenth century, culminating with the Gothic revival, the history of which shows how unable the architects of

the last century were to grasp the metaphysical truth that "you cannot put your foot into the same steam twice."

It is not my purpose, however, to indicate the lines upon which a discussion upon this subject should turn out, but rather to emphasise the suggestion thrown out by Professor Lethaby.

By conferences, discussion, and a considerable amount of thinking we ought to be able in course of time to evolve a body of doctrine very much sounder in its ultimate basis than the present muddlement—doctrines not to be codified into hard formulæ, but held as spiritual convictions governing decent architectural behaviour. Not till then shall we be in a position to hand on to pupils and students of architecture even an elementary theory of aesthetics based upon some sort of reasonable foundation; or shall we be able to rid ourselves of the harmful incubus of the nineteenth century and speak with a voice sufficiently united and convincing to influence the world of men and things.—Yours faithfully,

W. E. VERNON CROMPTON [F.].

William Wilkins and Sir Charles Barry [*ante*, p. 28].

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—Mr. Maurice B. Adams has evidently misinterpreted my reference to "the joint failures of William Wilkins and Sir Charles Barry," which was intended to embrace both the façade to the National Gallery and the plan of Trafalgar Square.

The idea of a National Picture Gallery emanated from Wilkins, who gave evidence before a Committee of the House of Commons on the "Application of the Principles of Design to Art and Manufactures," and suggested the appropriation of the space then occupied by the King's Mews for the purpose. His idea was approved, and in 1832 Parliament voted £50,000 for a building. About this time the open space in front of the King's Mews, which was formerly the courtyard of the Great Mews, received the name of Trafalgar Square; but eighteen years of desultory labour ensued before the building of the terraces, steps and fountains was completed.

The front portion of the National Gallery was entirely the work of Wilkins, who was forced, much against his inclination, to re-use the Corinthian columns and capitals which had been derelict since the dismantling of Carlton House. Before the works were started, controversy was strong in professional quarters regarding the design, but Wilkins was eventually allowed a free hand to finish the work, which he did in 1838. It is interesting to note that the original estimate was nearly doubled. Wilkins's scheme included the planning of the Square, irrespective of the College of Physicians on the western side, which Smirke had already completed, and the buildings on the eastern side, owned by George Ledwall Taylor, who designed them as flats and offices in 1836. Viewed in the light of subsequent events, the simple terrace at the head of the Square, as shown in Wil-

kins's scheme, with low balustraded screens in front and at the sides and an unambitious naval monument as a focal point, proves the desire of the architect to foil the sky line to the north. The pity is that this arrangement was not sanctioned. Wilkins died in 1839, Barry was rising to fame, and new forces were at work for the improvement of London. Four years later the head of Railton's column was challenging the restless silhouette of the National Gallery and flouting the ascending stages of Gibbs's spire; truly the giants were at war with the gods and were engaged in heaping Pelion and Ossa on Olympus. While the public press was extolling the triumph of Railton and obsequious to the genius of Landseer, Sir Charles Barry produced an elaboration of the scheme he had prepared ten years previously to the annoyance of Wilkins. There was little fear of a breach of professional etiquette; the new design treated the planning of Trafalgar Square as a mere bagatelle; it even embraced the rebuilding of the National Gallery, but the Government shied at the cost. Railton on top of his popularity came in for a share of opprobrium from those who knew, but, in the meantime, the public had been bludgeoned into insensibility and did not care how affairs ended. The usual compromise was effected. Barry spent £10,000 of the public funds on the granite and bequeathed a model quarry as an object lesson to London. Wilkins certainly failed in his façade to the National Gallery, and Sir Charles Barry's cavalier design for Trafalgar Square tells its own story.

I am more than indebted to Mr. Adams for giving me an opportunity to expand further on the subject. He will, I am sure, agree that these works, although far below the idealistic standard we all desire, are, notwithstanding, immeasurably superior to the abortive attempts made of recent years to redeem them.

A. E. RICHARDSON [F.].

FRANK SYDNEY CHESTERTON.

Frank Sydney Chesterton is, in our Allies' splendid phrase, "*mort sur le champ d'honneur*." Never a member of the Institute, he was yet known to so many of us that his passing should not go unrecorded in the JOURNAL. Born in 1876 and educated at St. Paul's School, it was natural he should begin his career by following the profession of his father and grandfather. He became a Fellow of the Surveyors' Institution, but Architecture had always been his passion, and soon claimed him for her willing slave. It was not long before he took a hand in the changing of London by rebuilding Hornton Street, Kensington. This was quickly followed by Hornton Court, a large block of flats and shops near by, the Sundial House (in both of which he collaborated with Mr. John Duke Coleridge), and other important buildings in Kensington High Street. His rebuilding of the Farringdon Works in Shoe Lane has been justly admired as a notable piece of London street archi-

ture. Chesterton also did a considerable amount of country work, including two admirable houses at Roehampton, one of them for Millicent, Duchess of Sutherland.

During a friendship of many years he always impressed me by a consistent devotion to all branches and aspects of his work. Every job he finished was a disappointment to him, however much it may have pleased his client and his friends. Each succeeding work was no more to him than a stepping stone to a more thoughtful and successful solution of the next problem. That is only to say that for him the practice of architecture was a continuing studentship. Despite a happy knack of pleasing his clients, he held steadily by artistic ideals which were happily matched with his sane and pleasant outlook

on life at large. During last winter part of his training in an O.T.C. was spent near my home, and he would drop in late in the evening, hungry for a gossip about the things that belonged to his peace. To that business of becoming an officer in the Royal Artillery he brought the same determination, and to war's discomforts the same slow smile that his friends well knew. When he fell within twenty-four hours of arriving in the fighting line, the art he served so faithfully lost a man whose career, so firmly established, promised a maturity of still greater distinction.

To affectionate remembrance of one who had a genius for friendship, those who knew Chesterton will add a happy pride in the courage with which he met the ultimate sacrifice. *Dulce et decorum.*

LAWRENCE WEAVER [*Hon. A.*]



9 CONDUIT STREET, LONDON, W., 9th December 1916.

CHRONICLE.

The R.I.B.A. Record of Honour : Thirty-eighth List.

Members' Sons fallen.

- STRANGE, Second Lieut. WILLIAM HILBERT CHARLES, Royal Irish Rifles. Killed in action on 31st October. Aged twenty. Elder son of Mr. C. H. Strange [*A.*], of Tunbridge Wells.
- KERR, Lieut. LESLIE H. F., Army Service Corps. Killed in a railway accident in France on his way home from the Front on ten days' leave. Aged 23. Younger son of Mr. R. H. Kerr [*F.*], and grandson of the late Professor Kerr [*F.*].

Serving with the Forces.

The following is the Thirty-eighth List of Members, Licentiates, and Students R.I.B.A., serving with the Forces, the total to date being 68 Fellows, 500 Associates, 305 Licentiates, and 287 Students :—

ASSOCIATES.

- Fleming, H. S. : Artists' Rifles O.T.C.
Powell, J. C. : Sub-Lieut. R.N.V.R. (joined in 1915).
Moore, Leslie T. : 2nd Lieut., Royal Engineers.
Oliver, Charles : 2nd Lieut., R.E. (serving in France).

LICENTIATES.

- Fare, Arthur C. : Devon Regt., attached Royal Engineers.
Wright, Alex. : Royal Engineers.

STUDENT.

Spence, W. N. : 2nd Lieut., Royal Engineers.

Promotions.

- Santo, V. G. [*A.*], to 2nd Lieut., Royal Engineers.
Cable, J. Sydney [*A.*], to 2nd Lieut., Royal Engineers.
Wheeler, Lieut. E. P. [*A.*], to Capt., R.A.M.C.

Captain Sydney D. Kitson [*F.*], who joined his regiment, the Yorks Hussars, when war broke out, has for the past twelve months held an appointment as Provost-Marshal in the Midlands. It has to be mentioned that his address near Newark, given in the *Kalendar Supplement* just issued, is temporary only ; his practice still continues at Lloyd's Bank Chambers, Vicar Lane, Leeds.

Ministry of Munitions : Controlled Establishment Canteens.

It is understood that arrangements have been made with the Ministry of Munitions whereby Controlled Establishment Canteens—the plans of which have been approved by the Canteens Committee of the Central Control Board (Liquor Traffic)—will be granted a building licence provided that no steel is used in their construction. The owners of the Controlled Establishments will be free to employ their own architects, and it has also been arranged that, should he be asked to do so, the President of the Royal Institute of British Architects will suggest the names of architects in the different districts where it is proposed to build canteens.

New State Department for Scientific and Industrial Research.

A deputation from the Conjoint Board of Scientific Studies waited upon the Marquis of Crewe, President of the Board of Education, on the 1st inst., to advocate a substantial increase of the grant in aid of Scientific and Industrial Research. The R.I.B.A. was represented by Sir John Burnet, R.S.A., LL.D., Vice-President.

It has been since announced that the Government have decided to establish a separate Department of Scientific and Industrial Research for Great Britain and Ireland under the Lord President of the Council, with the President of the Board of Education as Vice-President. They have



RICHARD MANNING HAIG PHILP, *Associate*.
Captain, Royal Field Artillery.
Killed in action (see p. 340, Vol. XXIII.)



TOM SADLER RUSHWORTH (Durham), *Associate*.
Captain, City of London Territorials.
Killed in action (see p. 340, Vol. XXIII.)



ERNEST SCOTT PETCH (Scarborough), *Associate*.
Private, Service Battalion, Royal Scots.
Killed in action (see p. 340, Vol. XXIII.)



JOSEPH WILLIAM BULL, *Associate*.
2nd Lieut., East Lancs., afterwards Lieut. R.E.
Died of wounds (see p. 339, Vol. XXIII.)

also decided, subject to the consent of Parliament, to place a large sum of money at the disposal of the new Department, to be used as a fund for the conduct of research for the benefit of the national industries on a co-operative basis.

In order to enable the Department to hold the new fund and any other money or property for research purposes, a Royal Charter has been granted to the official members of the Committee of the Privy Council for Scientific and Industrial Research under the title of the "Imperial Trust for the Encouragement of Scientific and Industrial Research." The Trust is empowered "to accept, hold, and dispose of money or other personal property in furtherance of the objects for which it has been established, including sums voted by Parliament to that end." The Trust can take and hold land, and can "accept any trusts, whether subject to special conditions or not, in furtherance of the said objects."

A substantial gift has already been made to the Trust by two members of the Institution of Mechanical Engineers for the conduct of a research in mechanical engineering to be approved by the Department, in the hope that this example will be followed by other members of the Institution.

Mr. H. Frank Heath, C.B., has been appointed permanent secretary of the new Department, and until 31st December all correspondence should be addressed to him at the offices of the Board of Education, Whitehall. On and after 1st January all correspondence should be addressed to: The Secretary, Department of Scientific and Industrial Research, Great George Street, Westminster, S.W.

George Edmund Street's Draughtsmen.

The collection of designs by George Edmund Street, presented to the Institute by his son, Mr. A. E. Street [F.], and described by Mr. Walter Millard [A.] in the last issue of the JOURNAL, have aroused considerable interest. The fine set of scale drawings submitted for the Edinburgh Cathedral Competition are masterly productions, and there have been several inquiries as to the identity of the artists responsible for them. The information is supplied by the survivor of the three draughtsmen who produced them, Mr. Wm. Rushworth [F.], Architect to the Education Committee of the Durham County Council. Mr. Rushworth writes: "The draughtsmen who worked on the Edinburgh Cathedral Competition were the late James Bell, of Great Russell Street; the late G. W. Drinkwater, of Oxford, and myself. It was Bell who drew the sculpture and stained glass which are so beautifully rendered. Street himself was the author of the skilful perspective drawings." One of the latter is reproduced in the headpiece to Mr. Millard's Paper. The drawings will remain on view in the Common Room till the 16th inst.

War Records.

For some months Mr. Muirhead Bone, who holds a commission in the Army, has been engaged in France making drawings of places and incidents in the war for permanent record in the British Museum. Reproductions of some of these drawings will be published (by authority of the War Office) in monthly parts, with appropriate letterpress. Each part will contain facsimiles of over twenty drawings. The first part is promised early in the present month with a preface by General Sir Douglas Haig. Mr. Bone is an artist of international reputation, whose drawings perhaps are better known abroad than at home. The work, it is claimed, will form a unique record of the conditions of the Western Front in modern warfare.

NOTICES.

THE SECOND GENERAL MEETING (BUSINESS) of the Session 1916-17 will be held Monday, 18th December 1916, when the Chair will be taken at 4.15 O'CLOCK P.M. precisely, for the following purposes:—

To read the Minutes of the General Meeting (Ordinary) held Monday, 6th November; formally to admit members attending for the first time, &c.

To proceed with the election of candidates for membership under By-laws 8, 9, and 10. [N.B.—The names and addresses of the candidates, together with the names of their proposers, are published in the JOURNAL for 25th November, p. 32.]

Licentiate and the Fellowship.

The next Examination of Licentiate desiring to qualify for candidature as Fellows will take place in January 1917. Application for admission to the Examination must be sent in by the end of the current year. Full particulars may be had on application to the Secretary R.I.B.A.

On View in the Common Room.

A COLLECTION OF DESIGNS BY GEORGE EDMUND STREET, R.A.

The following will be on view from December 18-31:

A SERIES OF DRAWINGS OF SOME OF THE FINEST EXAMPLES OF INDIAN ARCHITECTURE of about the fifteenth and sixteenth centuries, measured and drawn during his study tours by Mr. E. C. HENRIQUES, Government of India Scholar in Architecture.

The drawings illustrate the three principal styles of Saracenic architecture in India—identified with the Mogul Dynasty at Agra, in the North; the Ahmed-shahi Dynasty at Ahmedabad and Champanir, in the West; and the Adil-shahi Dynasty at Bijapur, in the South. Some Hindoo examples at Rajputana are also included.

Appointment Vacant, Ceylon.

An additional Architectural Assistant, aged between 24 and 28 years, is required in the Drawing Office at the Public Works Department Head Office, Ceylon. The officer appointed, who must be ineligible for Military Service, will be required to enter into an agreement to serve the Government of Ceylon for three years and proceed to Ceylon as soon as possible. Salary, £300 to £350, rising by annual increments of £25. Candidates must have passed the Qualifying Examination for Associateship of the R.I.B.A. Applications in the first place must be addressed to The Secretary R.I.B.A.

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TWO DESIGNS FOR PROPOSED WORK AT CAMBRIDGE BY ROBERT ADAM BETWEEN 1784 AND 1789.

By ARTHUR T. BOLTON, F.S.A. [F.]

TO reveal Robert Adam in direct contact with the work of the robustious James Gibbs should have the interest that might be derived from witnessing an encounter between a battle-cruiser and a dreadnought, for as a classical architect Gibbs was even more fully armed in all the points of the law, of "Palladio and the Ancients," than even Sir William Chambers himself. James Gibbs, in fact, may almost be taken as the chief of that school which the greatly daring Robert had set himself to revolutionise.

As Adam has been made to suffer unduly, owing to an occasional and probably temperamental outspokenness, it may be as well to point out that Gwynn, in his *London and Westminster Improved*, dismisses Gibbs's works with the comment, "There appears nothing uncommon and new in them, and he was rather a mannerist." Horace Walpole hits the mark in writing of Gibbs that "His praise is fidelity to rules, his failing want of grace." James Gibbs was born at Aberdeen in 1683, and by about the year 1720 was decidedly the architect most in vogue, a position which was strengthened by the appearance of his massive folio of designs, published as a First Edition in 1728. Owing to illness Gibbs retired to Spa, and died in 1754, the year in which Robert Adam set out for his famous three years' tour in Italy and Dalmatia. The strength of James Gibbs's influence can be measured by the way in which it affected the work in Scotland of William Adam the father, who died in 1748. On Robert's return to England, therefore, about the end of January, 1758, it was Burlington* and Gibbs rather than Inigo Jones and Wren that were "Lords of the Ascendant."

In the course of his professional career of thirty-four years up to his death in March, 1792, Robert Adam came in direct contact with Wren at Newby, and with Vanbrugh at Compton Verney and Kimbolton Castle, while here at Cambridge we shall see him dealing with problems initiated by Gibbs. In dealing with these Cambridge proposals by Robert Adam it will be as well in each case to set out first of all the pre-existing schemes by James Gibbs, which had arrived only at a very partial state of execution. It will thus be easier to follow the nature of Robert Adam's proposals, and to understand the limitations imposed upon him by the already existing buildings, by the nature of their respective sites, and by their all-important relationship to the great Chapel of King's College.

KING'S COLLEGE COMPLETION.

The completion of King's College had long been an ideal; the great and ever-famous Chapel was still standing isolated and rather gaunt-looking, in the absence of the intended and customary collegiate

* Burlington died 1753, Kent 1748, Archer 1743, and Leoni and James 1746, while Colin Campbell had preceded them in 1734.

buildings of mediæval times. In the earlier part of the eighteenth century there could be no question of work in the "Gothick taste," and accordingly, James Gibbs's proposals were conceived in pure Palladian classic. His buildings, at any rate, would have possessed the advantage of contrasting by their horizontal lines and solid mass, the opposing characteristics of the Mediæval Chapel. Of this early eighteenth-century scheme for the completion of the College, we have James Gibbs's own account,* given in his book as follows:—

King's College at Cambridge is now building † by the order of the Reverend Dr. Snape, Provost of that College, and of the Fellows thereof. The Provost, then Vice-Chancellor, laid the first stone of this fabric. It is built of Portland stone, and is detached from the Chapel as being a different kind of building, and also to prevent damage by any accident of fire. The court could not be larger than is expressed in the plan, because I found, upon measuring the ground, that the south-east corner of the intended east side of the building came upon Trumpington Street.

We may note in passing that the size of the "Court," or quadrangle, as shown on Gibbs's plan, is 282 feet by 240 feet. The two intended but unbuilt blocks on the east and south sides are planned each of them as 238 feet in length by 46 feet 3 inches in depth. The separating distance from the Chapel was made about 23 feet. The account given by Gibbs continues as follows:—

This college as designed will consist of four sides—viz., the Chapel, a beautiful building, of the Gothick taste, but the finest I ever saw; opposite to which is proposed the Hall and a portico. On one side of the Hall is to be the Provost's Lodge with proper apartments; on the other side are the Buttery, Kitchen and cellars, with rooms over them for servitors.

The south block with its great portico facing the Chapel was intended to be the chief feature of the whole design, and its absence to a large extent accounts for the ineffectiveness of the western block, which alone was actually erected. The description of the latter is as follows:—

In the west side fronting the river, now built, are 24 apartments, each consisting of three rooms and a vaulted cellar. The east side is to contain the like number of apartments.

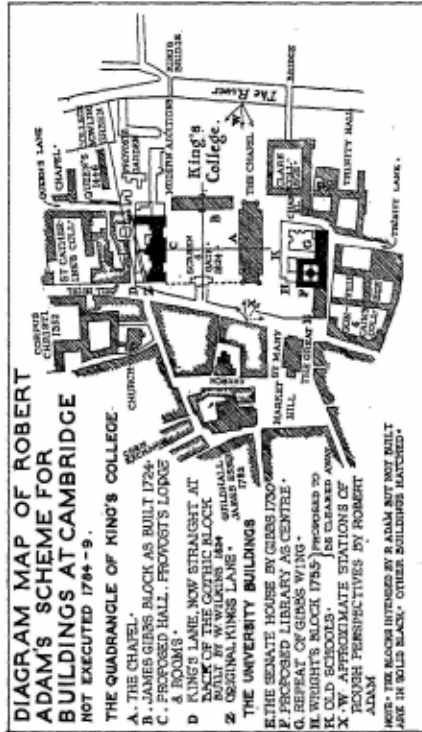
It will be seen, therefore, how unfair it is to judge James Gibbs by the one-third part of his entire scheme, which alone exists, without at any rate making an attempt to realise the effect of his full intention, as it would have appeared had it been carried out. When Robert Adam, over half a century later, came on the scene, the public attitude towards Gothic architecture would no longer have tolerated James Gibbs's enclosing quadrangle. It is safe to assert that the east block as proposed by him would never have been built. The west block, already built as we have seen, is, however, essentially a design that required to be repeated on either side of an axis leading up to a central and dominating feature, such as the intended great portico which was planned to face the Chapel, the present building. It stands, therefore, as a somewhat tame and ineffective façade, devoid of end supports to a centre bay which of itself was merely designed as a subordinated feature, in view of the intended grand portico on the main axis. Unsupported, this centre bay of the western block is rather too small in scale and pretty in character for the importance of its actual position.

Robert Adam, therefore, while putting forward as an independent building his new design for the southern block containing the Provost's Lodge, ‡ Hall, &c., felt that something would have to be done to the existing western block, in order to justify the position which the latter must acquire when acting as a centre between his own new building and the Chapel, from the point of view of the main approach from Trumpington Street on the east. He shows accordingly new end bays and a raised centre to be added to Gibbs's building. Adam, however, did not intend to strictly limit the heights

* *A Book of Architecture containing Designs of Buildings and Ornaments of James Gibbs*. 2nd ed., 1739.

† 1723: Fifty guineas paid to Mr. Gibbs. 1724: 25th March, Foundation Stone laid. 1729: carcase ready for the woodwork. Slow progress owing to want of funds and only ready 1749, when cost had been £11,539. (Willis and Clark, *Architectural History of University*, 1886, vol. i. 560.) There is no mention of Adam's designs now published.

‡ William Cooke, D.D. (1711–1787), Provost of King's, afterwards Dean of Ely. His son, the Rev. Wm. Cooke, was Professor of Greek at Cambridge, 1780–93. The old Provost's Lodge was a low gabled building standing in front of the west end of the Chapel. It is illustrated in Willis and Clark. Trumpington Street was very narrow, and the Chapel was formerly hemmed in by low buildings.



BUILDINGS AT CAMBRIDGE, BY ROBERT ADAM,
R KING'S COLLEGE AND FOR THE COMPLETION
UNIVERSITY BUILDINGS.

TRUMPINGTON STREET.

KING'S LANE.
BACK YARD FOR
THE SCHOLARS.

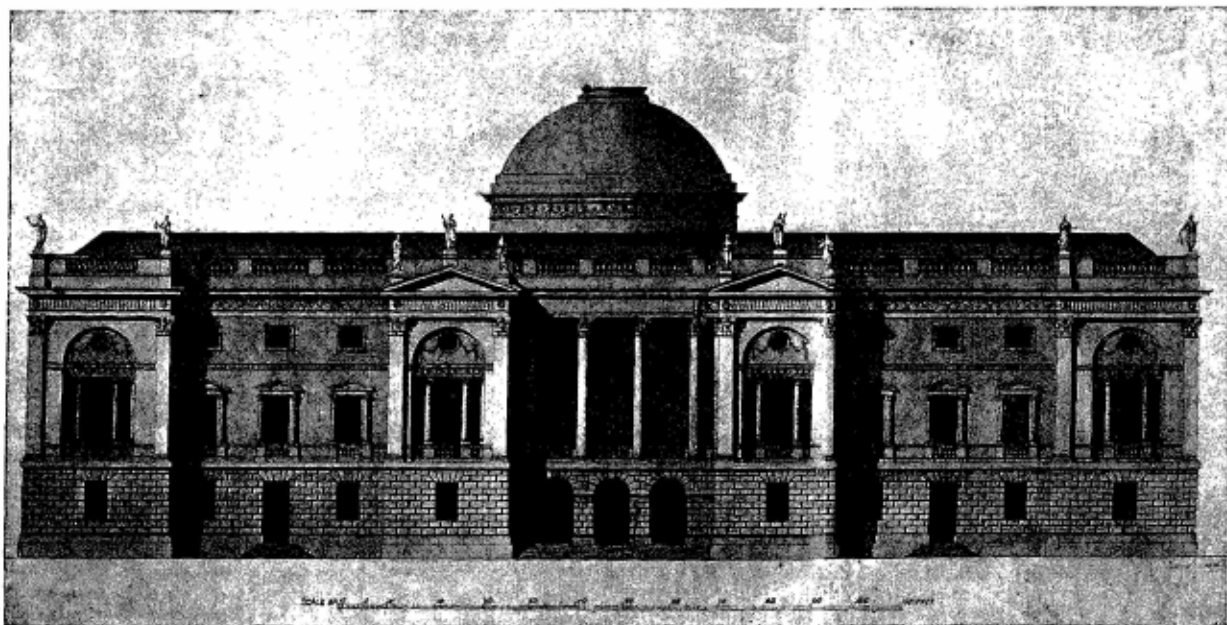
SITTING ROOM.
BED ROOM.
SITTING ROOM.
BED ROOM.
LECTURE PASSAGE.
SITTING ROOM.
PASSAGE.
SITTING ROOM.
BED ROOM.
SITTING ROOM.
BED ROOM.
COLLEGE HALL.
VESTIBULE.
PASSAGE.
BED ROOM.
SITTING PASSAGE.
BUTLER ROOM AND BANTY.
STAIR CASE.
KITCHEN COURT TO THE HALL.
KITCHEN COURT TO THE PROVOST'S LODGE.
HALL.
STORE ROOM.
HOUSE-KEEPER.
BED ROOM.
PROVOST'S LODGE ENTRANCE FROM GARDEN.
STUDY.
PARLOR.

ARTHUR T. BOLTON F.S.A.
ARCHITECT
28 VICTORIA ST. S.W.
MAY 1906

THE PRINCIPAL STORY OF THE BUILDING FOR THE SOUTH SIDE OF KING'S COLLEGE
, (COMPRISING PROVOST'S LODGE, COLLEGE HALL & SCHOLARS ROOMS. SEE DIAGRAM PLAN ABOVE
N OF THE BLOCK)

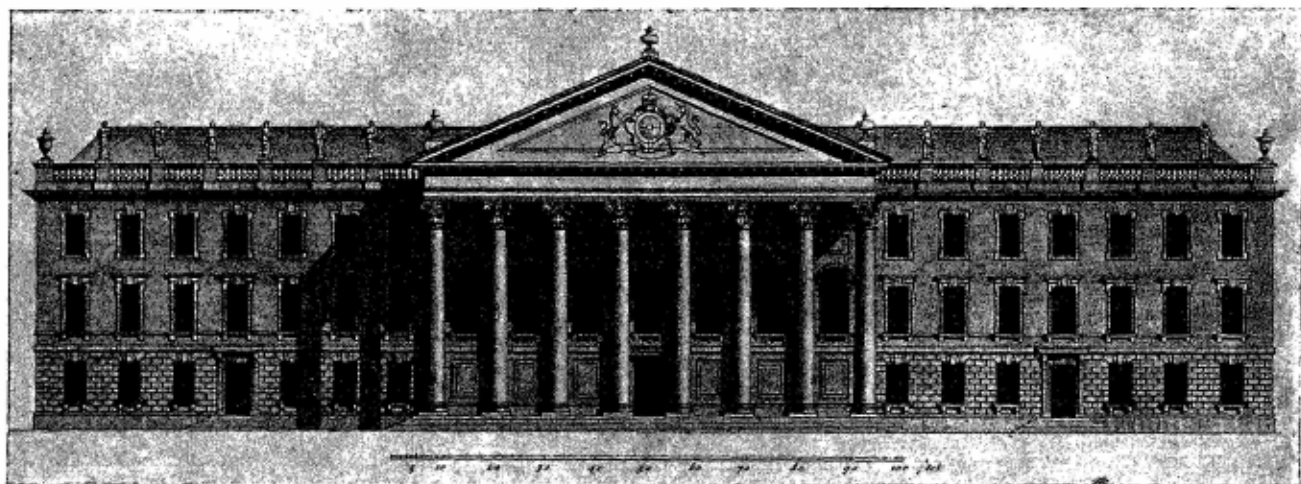
SCALE OF FEET
0 10 20 30 40 50

PLAN OF THE PRINCIPAL STORY OF THE BUILDING FOR THE SOUTH SIDE OF KING'S COLLEGE
COMPRISING PROVOST'S LODGE, COLLEGE HALL & SCHOLARS ROOMS. SEE DIAGRAM PLAN ABOVE
FOR POSITION OF THE BLOCK

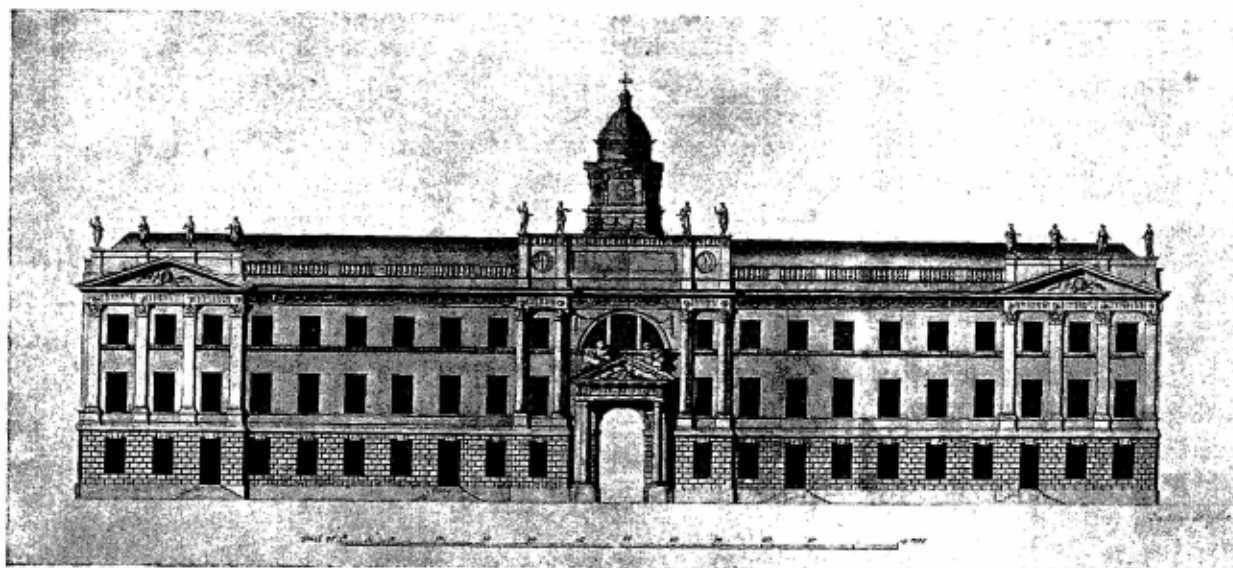


DESIGN OF A FRONT FOR THE SOUTH SIDE OF THE QUADRANGLE OF KING'S COLLEGE, CAMBRIDGE,
BY ROBERT ADAM, 1784.

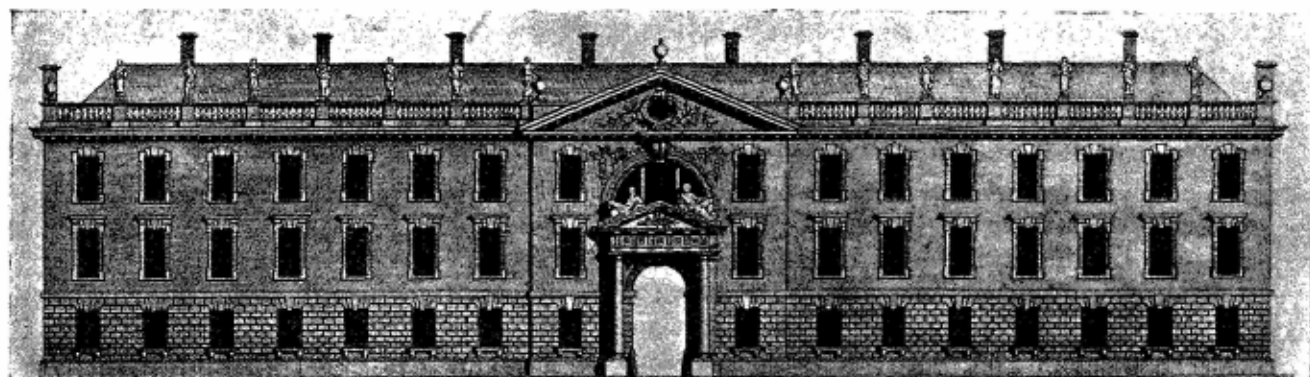
of his own new block to the lower levels of this older building. By the scales on the drawings there is a difference in his favour of quite ten feet to the top of the main cornice. While it is fortunate that the older architect's work was not tampered with, it must be admitted that Adam had some grounds for his proposed alteration, and that his amended design is one of considerable interest. All through these later proposals for the completion of the College it is curious to notice the external rather than the internal point of view, that of the man in the street rather than of the Collegian. As Gibbs has chosen to illustrate the eastern and back elevation of his building, it should be noted that his design has nine windows on either side of the centre on the eastern face, and only seven on the western, a very important difference which exists in the building as executed.



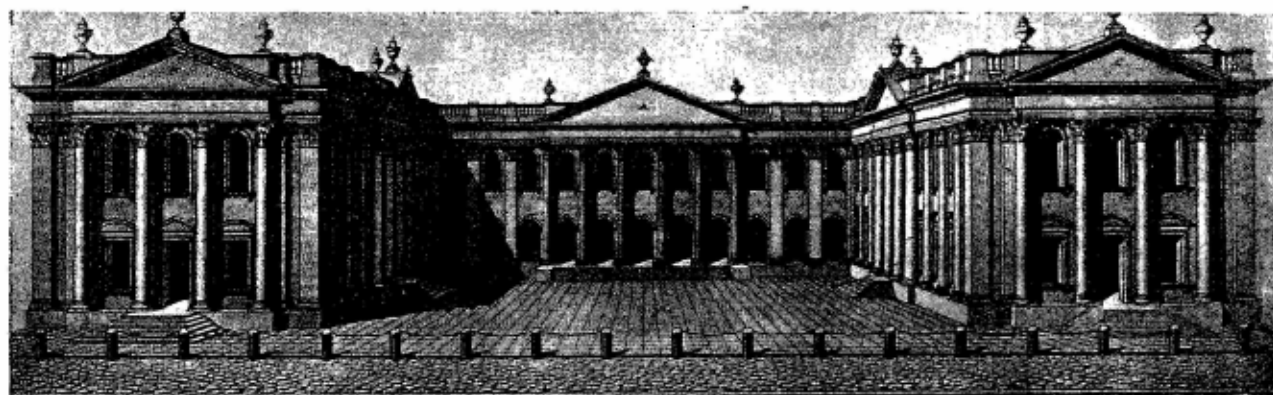
THE UPRIGHT OF THE SOUTH SIDE OF KING'S COLLEGE FRONTING THE CHAPEL, BY JAMES GIBBS, 1730.



ROBERT ADAM'S SKETCH FOR ALTERING THE FRONT OF THE WEST SIDE OF THE QUADRANGLE DESIGNED AND EXECUTED BY GIBBS.



GIBBS'S ELEVATION OF THE EAST SIDE OF THE BLOCK ON THE WEST SIDE OF THE QUADRANGLE.



A, The Royal Library.

B, The Consistory and Register Office.
GIBBS'S VIEW OF THE PUBLIC BUILDING.

C, The Senate House.

Robert Adam's own proposed independent southern block with its unique circular College Hall, and its interesting planning, is quite characteristic. We may safely regret that he did not succeed in forestalling William Wilkins, R.A. (1778-1839), who in the next century (1824)* covered the same site with additions to King's College in a very indifferent Gothic. Had Robert Adam's design been carried out by himself, with all the care and refinement which he bestowed upon the masterly Register House at Edinburgh, and with all the advantage of his later experience, it is certain that, so far as this proposed new block was concerned, Cambridge would have boasted another architectural masterpiece.

THE UNIVERSITY BUILDINGS.

On the other side of King's Chapel, a little higher up Trumpington Street, another problem was presented to Robert Adam for which he tried various solutions without, I think, the same interest and enthusiasm that he had given to the proposed new building for King's College. Probably there were great difficulties in the way, and only a very remote chance of the work being done. Very acute controversies in fact had already been excited locally on the subject. The problem was to plan an adequate Library Building which would combine in some way with that fragment of Gibbs's scheme for the Public Buildings, which alone had been built—i.e., the existing Senate House.

In his book already quoted, Gibbs tells us very little about this scheme of his, and he gives only one plate of it. He says:—

The Public Buildings at Cambridge, of which I have given but one plate, the front in perspective, and the plan in small over it. It consists of a Library, the Consistory, Register House, and Senate House. The latter is already built of Portland Stone, and the rest of the building is to be. It is of the Corinthian order, having all its members enriched; the ceiling and the inside walls are beautified by Signori Artari and Bagutti.

The reason of Gibbs's reticence is to be found in the history of the erection of the Senate House. The scheme started in 1721, the foundation stone being laid on June 22nd, 1722. In 1725 the inside work was started and Essex appears as contracting for the carpentry. The plain plaster-work was kept distinct from the ornamental, which was undertaken by the two Signori. In May, 1727, opposition arose to the further prosecution of the scheme and the trenches actually dug for the continuation were filled up, in spite of a letter written by Gibbs in May, 1728, defending his plans.

The Senate House was opened in 1730, having cost £13,000. Willis and Clark think that Gibbs received only £100 for his services, despite the fact that he wrote in 1730 that his fees were five per cent., but that out of respect to the University he would accept half the customary amount calculated on the actual cost, of which he adds, curiously enough, that he did not know the amount.† I think we may safely assume that the whole affair was a sore subject to the unfortunate architect. There were evidently great difficulties in collecting the funds. As in the case of King's College so here again, in considering the "Public Buildings," we are apt to judge Gibbs by a single side block intended to be repeated, and to lead up to a dominating feature which is absent. By itself the Senate House is a heavy fragment, and Robert Adam ‡ was evidently much puzzled what to do with it. The completion of Gibbs's three-sided quadrangle, open to the main street, was no doubt considered impossible, as constituting too great an encroachment on a principal view of the famous Chapel of King's College.

Adam seems to have thought that the best solution would be to clear away Wright's building § of

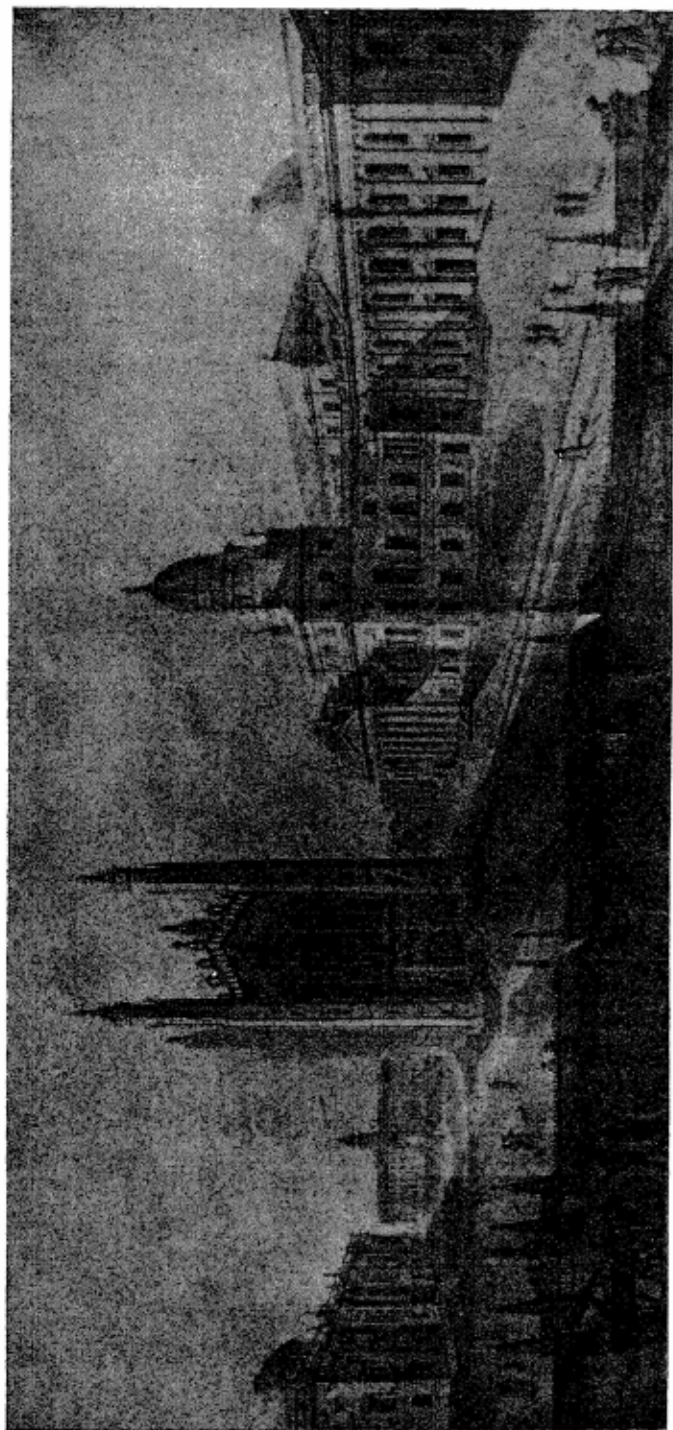
* 25th March, 1823. Competition won by W. W. 1824, contract £73,000, 1828, completed at cost of £100,000. W. W. had instructions to Gothicise Gibbs's wing, which had a second narrow escape.—*Wal. Hist. Camb.*

† Willis and Clark, *Architectural History of University of Cambridge*.

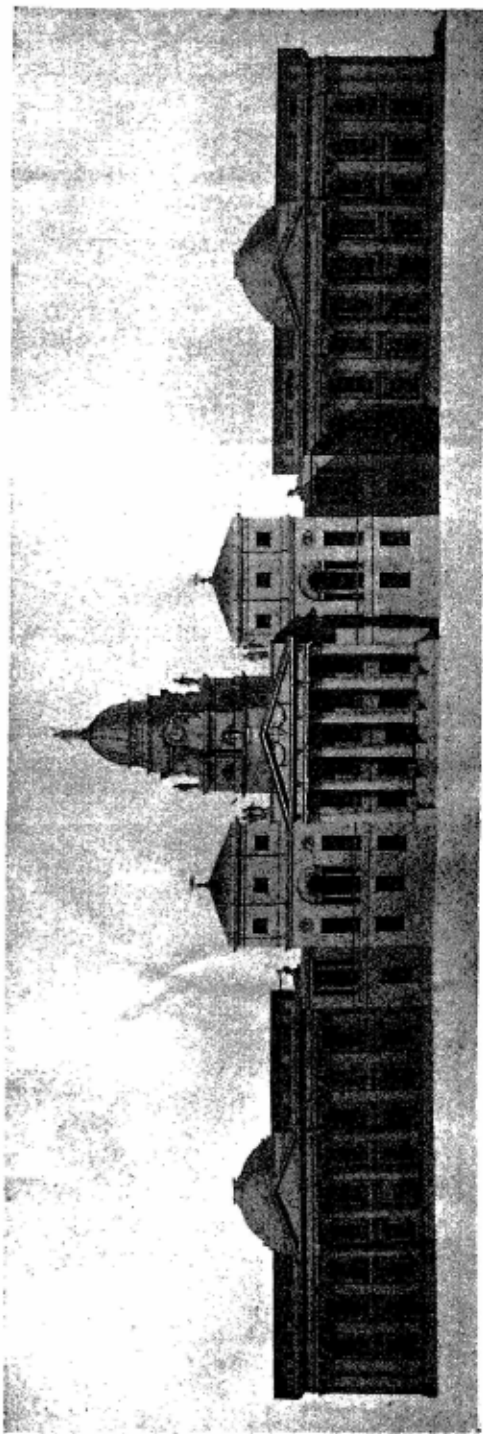
‡ Willis and Clark, who evidently did not know of Adam's scheme, say that a grace was passed in 1783, 28th June, to obtain designs for a south wing, and that, in 1785, plans by Brettingham were rejected, and again some by Soane in 1791. Some houses were pulled down between 1787-89 and an enclosing wall built. Soane's proposal was to repeat the

Senate House wing externally as originally intended, while designing characteristic interiors of his own. His drawings are in the Soane Museum.

§ "I shall only take notice that the additional building to the University Library which is now carrying on under the auspices of his Grace of Newcastle, the Chancellor, though built of fine stone and much enriched with ornaments on the outside, yet falls very short in beauty when compared with the Senate House adjoining." Extract from a letter by Charles Lyttelton, Dean of Exeter, and Bishop of Carlisle, to Sander-son Miller, in July, 1757. See *Eighteenth Century Correspondence*, edited by Miss L. Dickens and M. Stanton, page 371.



PERSPECTIVE GROUP OF KING'S COLLEGE, THE CHAPEL, LIBRARY, AND PUBLIC BUILDINGS. VIEW FROM TRUMPINGTON STREET.



ELEVATION OF PROPOSED LIBRARY AND PUBLIC BUILDINGS, CAMBRIDGE.
Gibbs's Senate House on the right repeated on the left, the dome added. The New Library forms the centre of the whole scheme.

1755, as well as the old Schools (1370-1475) beyond. Apparently Gibbs intended to mask these mediæval buildings by his new three-sided quadrangular block. Evidently, on the other hand, Adam sought to give a clear view both of the Chapel of King's, and of Clare College in the distance, and considered all the older work as merely an obstacle in the path of a desirable improvement. Accordingly Adam was endeavouring to scheme the proposed Library as a square central block, which should be something like the Scottish Register House in plan, but possessed of a far less important central Rotunda. The Senate House by Gibbs and its exact reproduction were to form the two wings of this new and imposing group. There are two rough perspectives in the Soane Collection set up from points of view which I have approximately marked X and W on my plan. They show how Adam, taking the Chapel as the main centre of the entire group, desired to plan the whole of his new buildings around it, while giving particular attention to the two fragmentary blocks which James Gibbs had already erected.

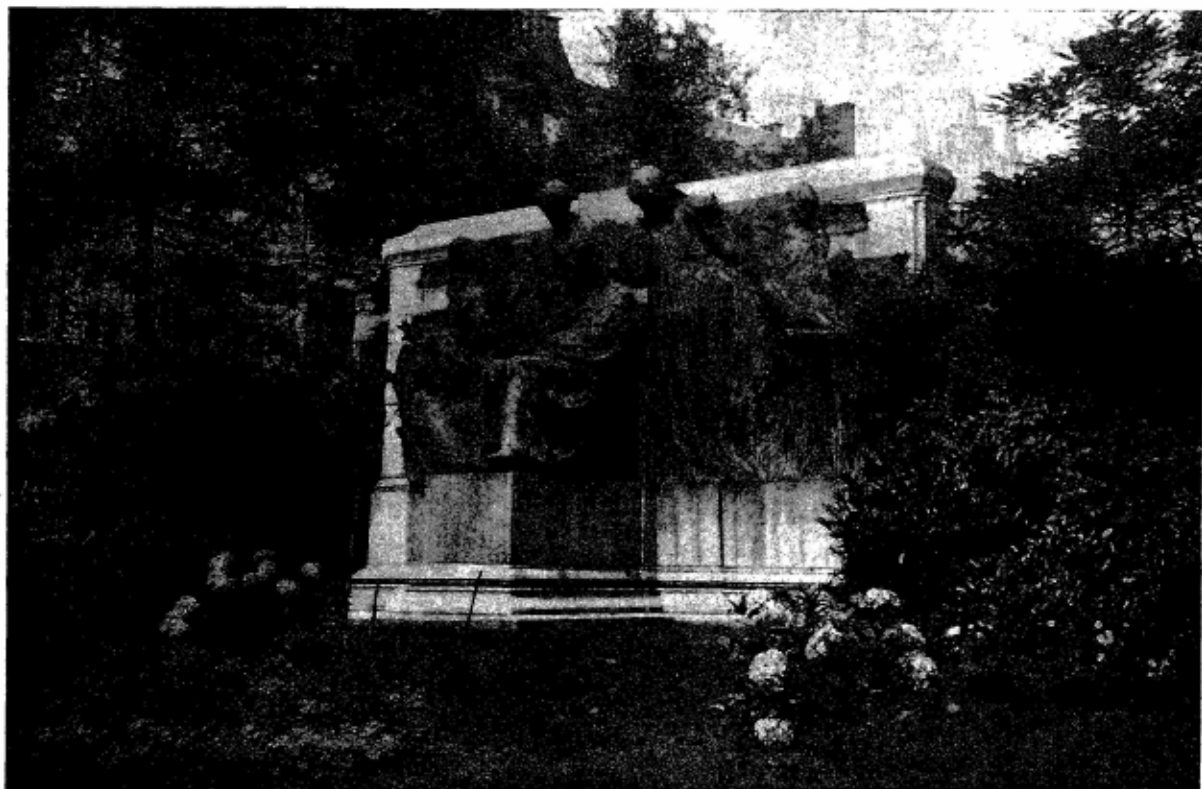
It is permissible to doubt whether Robert Adam would have succeeded as well with his grouping on this northern side of King's Chapel, the Senate House being a very stubborn and awkward factor in the case. It is possible also that there were already some very influential advocates of "Gothick," as some of the Adam alternative designs for the Library would seem to show an attempt to give a vertical and aspiring character to this proposed new building which was required to act as a centre to wings of Gibbs's Palladian Classic. Such a compromise might be thought at that time to be more consistent with the lines of the Mediæval Chapel, and preferable to the horizontality of the pure classic of the existing Senate House.

Nothing at all in either case came of these Adam proposals. The Senate House by Gibbs still stands as a somewhat forlorn fragment. C. R. Cockerell, R.A., who died in 1863, at a later time * started a fine Neo-Grec scheme for a new University Library, of which, however, only a part was built. His design having been abandoned, this Grecian wing joins abruptly on to the older buildings of the mediæval Schools, which were subsequently extended in 1862 by Sir Gilbert Scott, R.A., in a reproduction of the older style. Some additional and restoration work was afterwards carried out by the late John L. Pearson, R.A.

* A competition was held in 1829 between Cockerell, Decimus Burton, Rickman, and W. Wilkins, which was won by the first-named. In 1836 a second trial took place, and at

last in 1837 the first stone was laid, and the building was completed in 1842 at a cost of £23,400. (Willis and Clark, *Architectural History of University of Cambridge*.)





MONUMENT TO FRANZ LAURE, GHENT.

REVIEWS.

ARCHITECTURE AND SCULPTURE.

The Relation of Sculpture to Architecture. By T. P. Bennett, A.R.I.B.A. La. 8vo. 1916. 15s. net. [Cambridge University Press.]

A warm interest in the subject and an obvious desire to be helpful to architects and sculptors make Mr. Bennett's book on "The Relation of Sculpture to Architecture" of real service. The work is most refreshingly free from vague and wordy generalisations, and it is pleasant to find that the fluent and solemn nonsense of the "Higher Criticism" has no place in it. There is perhaps just a tendency to prescribe certain treatments, so that Mr. Bennett's remarks sometimes partake of the nature of recipes. This though, with here and there a temptation to judge monuments by the same standards of criticism that might apply to buildings, in no way detracts from the high merit of the work.

Mr. Bennett's observations concerning architect and sculptor are to the point, for the relation of one art to the other can never be harmonious unless there be sympathetic and scholarly collaboration. This can only come about by a more intimate knowledge of architecture on the part of the sculptor, and by a wider and more sympathetic appreciation of sculpture

on the part of the architect. It must be extremely difficult for an architect properly to understand and sympathise with the varied manifestations of the modern spirit in sculpture, for his training has brought him to look upon sculpture as having almost entirely an architectonic significance. The training of the sculptor is certainly inadequate when it merely consists of a knowledge of his art from a modeller's point of view; on the other hand, it must not be forgotten that a large part of sculpture—perhaps the greater portion—has little structural relation to architecture. Architectural sculpture did not entirely absorb the activities of the sculptors of antiquity, any more than it does the activities of those of to-day, for the makers of statues, statuettes, portrait busts, and figurines, &c., were as actively employed as those who decorated buildings. Nero, we are told, sent emissaries to Greece to collect works of art, and it is stated that they carried off from Delphi alone 500 bronze statues to decorate his Golden House, yet those that remained numbered, it is said, 3,000!

The feeling for appropriate design is very marked in the early work of all periods, and one usually finds admirable decorative qualities associated with the most primitive modelling, but the great examples of decorative sculpture in all periods rarely lack the

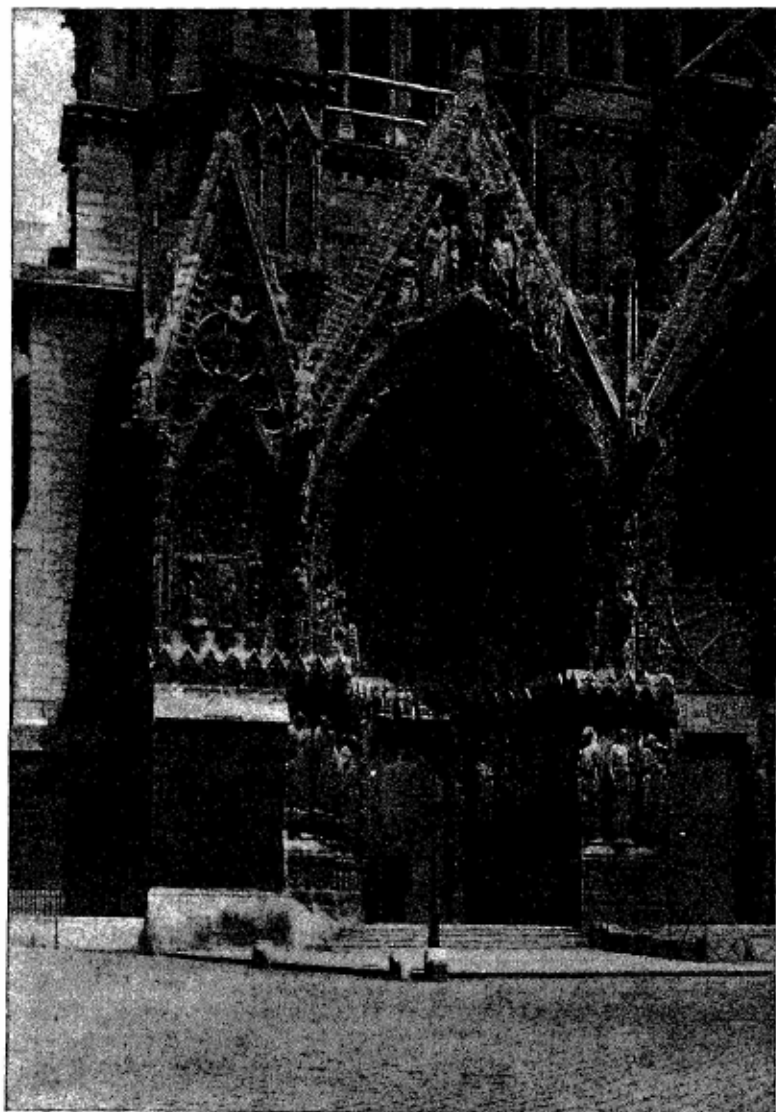
glory of design that is decoratively expressive and the form that is true to nature.

Mr. Bennett states the case very clearly when he speaks about the subservience of one art to the other—i.e., in buildings and in monuments respectively. He properly recognises the different purpose which sculpture fulfils when it is used to

ture—differences which are too often forgotten—depends much that Mr. Bennett has to say. In the *Principles of Sociology* Herbert Spencer observes, when dealing with "The Professions," that "the association between architecture, sculpture and painting is so close that a description of their origins, considered as distinct from one another, is not easy, and those who judge only from the relations in which they are found in the remains of early civilisations are apt to be misled." This is true, for difficult problems confront one who seeks to establish in too rigid a manner the relation of one art to another. Both architecture and sculpture are self-contained arts, each bearing within the limits of its characteristic qualities all that is necessary for its own salvation, yet neither, it may be said, fulfils its richest possibilities until it has been wedded to its affinity.

Mr. Bennett is occasionally tempted to suggest the use of certain architectural forms which appear to be decoratively suitable, without, I think, having properly considered their intention and derivation. He speaks, for example, of the suitability of certain Egyptian forms for modern purposes. Herein lies, I think, a danger. One is reminded of such terrors as the façade of the late Egyptian Hall, in Piccadilly. The characteristics of Egyptian architecture and sculpture are strikingly indigenous and peculiarly the result of the marvellous climate and material of Egypt, as well as of the temperament of the Egyptians; of all styles it seems to be the most inappropriate in northern climes.

With regard to the influence of material on decorative treatment and design, it is both instructive and interesting to follow the development of sculptural enrichment from the



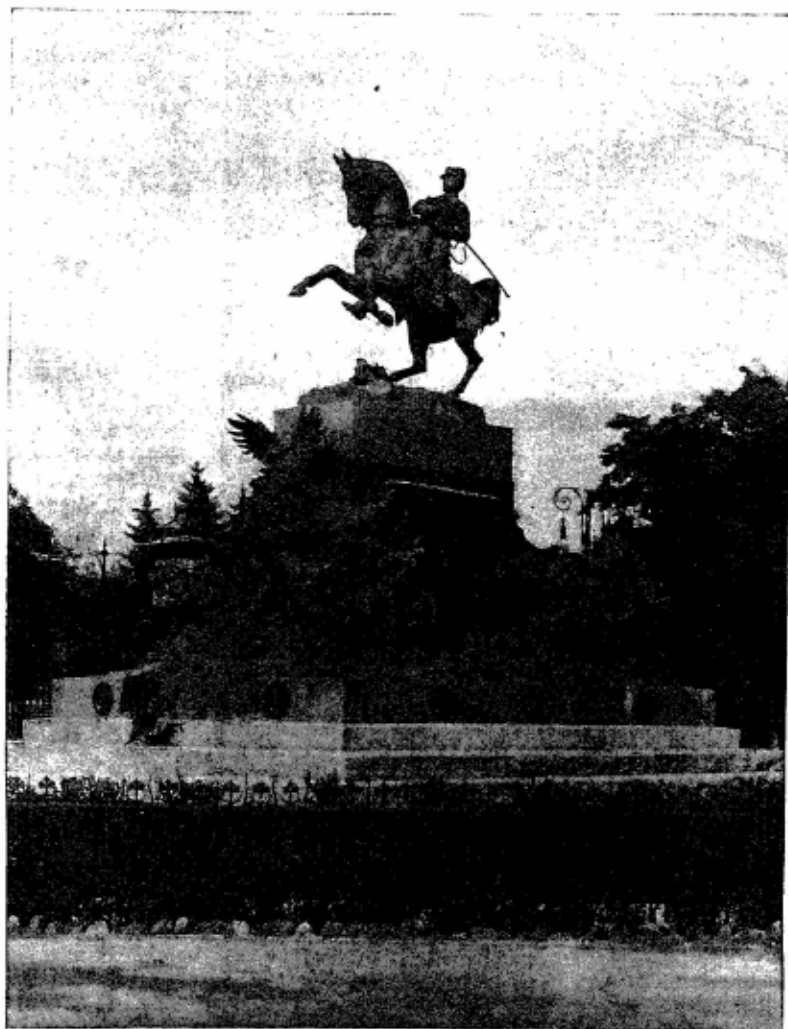
DOORWAY OF RHEIMS CATHEDRAL BEFORE THE BOMBARDMENT.

decorate architecture, and when it is the essential and vital part of a monument. In the former case its purpose is mainly ornamental, and in the latter chiefly emotional; in one case it should give aesthetic satisfaction because of its suitability to architectural environment, and in the other it should attract by a direct appeal to the senses. Upon the recognition of these cardinal differences in the purposes of scul-

granite simplicity of the Egyptian, through the more human Pentelic marble of the Greek, to Roman and Renaissance sculpture, the rich and exuberant detail of which depended greatly upon the characteristic qualities of Italian marble. How inseparable, too, is the complicated delightfulness of Gothic ornamental sculpture from the free-cutting materials which mostly give it its *raison d'être*.

The chapters on decorative sculpture are suggestive and helpful, but they are too much occupied by the discussion and illustration of particular treatments, such, for instance, as the "Spandril Treatment," "The Medallion," "The Trophy," and so forth. Mr. Bennett, in discussing at length the position of sculpture upon buildings, does not appear to question the methods that so generally prevail amongst architects in this country. The sculptured items upon our buildings have too frequently the appearance of characterless decorative "properties," applied with little thought and invariable repetition in a cut-and-dried manner; the relationship aimed at appears rarely to be that of more intimate and individual decorative expression. The sculptured frieze, figure or group, so placed that it can only be seen effectively from the top floor windows of the building opposite, can have little decorative value and certainly small interest for people in the street; and large groups so placed that they can easily be damaged by passers-by, or clambered over by children, are also obviously in the wrong position. This unsuitability in the placing of sculpture is to be seen very frequently inside buildings where positions are arranged for statues, groups, &c., with seeming complete indifference to the necessities of proper aspect and lighting. It is the common experience of sculptors to see their works placed upon pedestals and in niches where the effect is altogether marred by want of knowledge and consideration on the part of architects.

country which Mr. Bennett might have illustrated with greater helpfulness than several feeble continental examples which he has selected. What could be worse, for instance, than the Bismarck Monument in Berlin, or the equestrian Joan of Arc at Chinon? What he has to say about the huge German monuments is true, but fine taste in monumental sculpture is rare in Germany, and scholarly



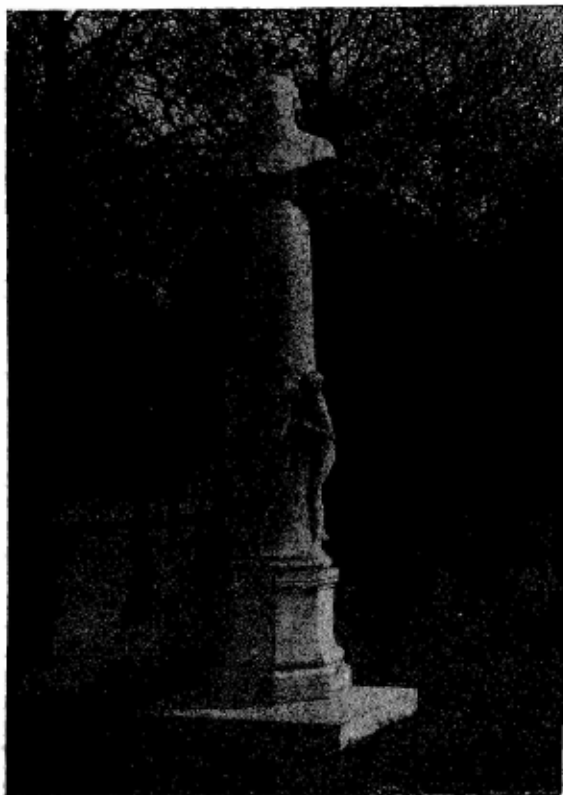
MONUMENT TO PRINCE AMADEUS OF SAVOY, TURIN.

With regard to monuments the admirable podium frieze of the Albert Memorial may be mentioned as an excellent example of good placing and fine decorative effect. Monuments ought not only to be effective when seen from a distance, but they should also be of interest when it is possible to inspect them closely.

Mr. Bennett's chapters upon "The Placing of Monuments" are excellent. As he points out, the ill-effect produced by so many of our monuments is usually the result of bad placing; however, the finest setting could never make some of the works illustrated attractive. In spite of much ill-informed criticism, there are many fine monuments in this

modern monuments, such as one often sees in France and Italy, are seldom met with in that country. *A propos* of his remarks on "Arch Monuments," it may be interesting to note that in 1886 a huge decorative group in plaster (by Falguière, I believe) stood upon the top of the Arc de Triomphe, and was eventually removed as it was not thought successful. One of the four great decorative groups on the lower part of the Arc is the celebrated one by Rude: this superb work, "Le Départ," would perhaps be con-

sidered by most sculptors the highest achievement of modern decorative sculpture. In the description of the gigantic monument to Victor Emmanuel in Rome, Mr. Bennett speaks of it as being the work of the brilliant sculptor Angelo Zanelli (not "Lanelli"). Zanelli is one of a number of sculptors who have done the sculptural decorations, but the monument was, of course, designed by the scholarly architect Sacconi, who died in 1905.



MONUMENT TO ARMAND SILVESTRE, PARIS.

Mr. Bennett shows a sympathetic view towards modern sculpture, but he is a little inclined to speak of "best periods" and to sound "warning notes" with regard to certain novel treatments. Treatment, after all—as Mr. Bennett recognises—depends greatly upon suitability to environment. How fascinating, for example, in spite of their freedom and extravagance, are many of the fountains and garden statues in Italy. With regard to these, one is

reminded of a remark in Mr. W. D. Howell's story "An Indian Summer": someone asks whether a certain garden statue is good, and is told in reply that it is "better than good," for it is "the worst possible Rococo." Mr. Bennett properly condemns extravagance, and points out the dangers of a too free treatment. Doubtless sculpture of an exaggerated and rudimentary kind is periodically put forth with a good deal of trumpeting and advertisement, and is seriously discussed in the Press by those who have little knowledge of the subject. It may, however, be pointed out that the feeblest and most commonplace work is tolerated without protest by those who should know better, because it happens to conform to conventional views of suitability and good taste. Sound scholarship should certainly be the foundation of study in all the arts, but it must be refreshed with new ideas and vivified by imagination. It may also be observed that a tendency to extravagance often results from a quite reasonable and proper desire for innovation. It is to the vivifying influence of this tendency that we owe so much that is fresh and delightful in French art. When it does not exist the almost certain result is meaningless convention. This tendency to extravagance asserts itself quite naturally when Convention has taken the place of Inspiration, and Formula that of genuine Expression. No better illustration of this can be given than the appalling dulness of sculpture in this country during the middle of the eighteenth century, as compared with the virile and admirably executed—though often extravagant—compositions of the Frenchman Roubilliac. To realise what a conventional state English sculpture had reached at that period, one has only to read the Tenth Discourse of Sir Joshua Reynolds.

Mr. Bennett's volume is fully illustrated, but the illustrations might perhaps have been selected with greater effectiveness, for one misses many outstanding works which should have been included, and finds certain commonplace things which would have been better omitted. The book also bears some evidence of a want of careful revision, but the errors are few, and Mr. Bennett deserves the thanks of architects and sculptors for his excellent and painstaking work, which, besides being of considerable general interest, should prove a valuable work of reference. Mr. Bennett's very sympathetic attitude towards modern sculpture will be much appreciated, and it is to be hoped that this will not be his last work dealing with a subject of really national importance.

W. GOSCOMBE JOHN, R.A. [*Hon. A.*].





9 CONDUIT STREET, LONDON, W., 23rd December 1916.

CHRISTMAS GREETINGS.

In the name of the Royal Institute of British Architects, I wish to send, as I did last year, a Christmas message to all architects serving with the Forces. God grant that the New Year may bring to us again the blessings of peace and the restoration to civil life of those who have for so long endured separation from their homes and the horrors and dangers of the battlefield.

There are many of our calling from "Overseas" fighting side by side with their brethren from Great Britain and Ireland, and I should like them to know that the Mother Country has them in constant remembrance and sends affectionate greetings to them as well as to her sons of the homeland. We old ones left at home, keeping things going as best we may, follow with an anxious pride the doings of our gallant young men who are bearing the brunt of this terrible conflict.

I should like, too, to assure of our heartfelt sympathy those who by the fortune of war have been bereft of their dear ones. We have seen the most brilliant gifts offered freely and without complaint upon the altar of the country. The names of the men who have suffered and died for us will always be held in tender remembrance, and it is hoped that in time the regret for what might have been will be tempered by the remembrance of dangers braved and duties fearlessly accomplished.

ERNEST NEWTON,
President R.I.B.A.

At the moment of going to press the following letter, dated 30th October 1916, and addressed to the Secretary, comes to hand from the Royal Victorian Institute of Architects:—

DEAR SIR,—I have been directed by my Council to convey heartiest Christmas greetings from this Institute to the Royal Institute of British Architects as the senior body representing the Architects of the Empire.

This is a time of stress which has brought us more

closely together; we therefore sympathise with you in your difficulties because we experience them ourselves. We share also with you the joy of active service for the Empire because many of our own younger men are absent from their accustomed places gladly assisting in the great fight for freedom and Empire.

It is with pride that we recognise the cheerfulness with which so many of the Architects of Britain have answered to the call of service, laying aside for the present all the professional prospects which every true Architect holds so dear, in order that this world-wide conflict may be brought to a successful issue and an honourable and lasting peace established.

We look forward to the day when the arts of peace may be again practised by the Architects throughout the Empire and amongst our gallant Allies.

This Institute would be grateful to you if you would convey to the representative Societies of our Allies, France, Belgium, Italy and Russia, its Christmas greetings, and expressions of our sympathy with them in their heroic sacrifices.

With every fraternal greeting,
We have the honour to be, yours very faithfully,
W. A. M. BLACKETT, President.
JOHN LITTLE, Hon. Secretary.

CHRONICLE.

Subscriptions of Members Serving with the Forces.

On the recommendation of the Finance and House Committee the Council have decided to remit the subscriptions and contributions due on 1st January 1917 of all Members and Licentiates serving with H.M. Forces who make written application for such remission prior to 1st July 1917.

To Members "Joining up."

Members of the Institute who may shortly be called up are invited to join the Training Reserve Battalion from which a number of members of the architectural profession have already obtained commissions. The battalion is stationed near London. Applications, marked "Recruiting," should be made immediately to the British Empire League, Norfolk House, Laurence Pountney Hill, E.C.

Possible Appointments for Architects.

Information reaches the Institute that appointments are occasionally open to architects in connection with the billeting of troops. The work includes the assessment of rents on the basis of the "direct and substantial loss" caused by the military occupation, as well as the assessment of dilapidations. Some practical experience in the management of house properties is essential, as well as experience in architecture and building surveying. Members qualified for this kind of work are requested to send in their names to the Institute, addressed to "The Hon. Secretary, Selection Committee."

Charing Cross Railway Bridge.

The Improvements Committee of the London County Council, at the meeting last Tuesday, recommended that in the event of the South-Eastern and Chatham Railway Company promoting in the session of Parliament for 1917 a Bill seeking powers similar to those refused by Parliament in the Session of 1916, relative to the strengthening of Charing Cross Bridge, the Improvements Committee should be authorised to confer with representatives of the various authorities and bodies concerned in the public questions arising, including the Board of Trade, H.M. Commissioners of Works, the City Corporation, Port of London Authority, Westminster City Council, Lambeth Borough Council, the Royal Institute of British Architects, and the London Society.

Mr. Waterhouse's Chadwick Public Lectures.

The Chadwick Public Lectures, now in course of delivery, have included a series of three given in the hall of the Surveyors' Institution by Mr. Paul Waterhouse [F.] on the subject of "Architecture in relation to Health and Welfare."

In the first lecture, entitled "War and Architecture," delivered on the 30th November, the lecturer argued that architecture was essentially an element in hygiene, even as regards those aspects of architecture which are least connected with sanitation. For hygiene was the maintenance of health by the improving of environment; and architecture, good or bad, was an inevitable part of man's environment in all civilised life. Under the heading of architecture was necessarily included town planning—i.e., the design not of individual houses, but of houses in groups. War and architecture interacted on one another as cause and effect. Destruction was not the only effect of war on architecture. Alongside irreparable losses there were such losses as the obliteration of certain parts of cities which would probably, after the declaration of peace, herald new advances in town planning. Moreover, England had learned during the war how to collect and how to spend public money on a large scale. Such expenditure would of course leave England poorer, but the lesson learnt might perhaps lead in time to expenditure—liberal expenditure—on the pleasures of peace, rather than on the horrors of war. Here was a chance for those larger schemes of municipal town improvement which lacked only funds to give them realisation and success. Possibly also England would have learnt that, in municipal no less than in Parliamentary elections, it was important to choose specially qualified men rather than men distinguished merely by party tickets. London in particular needed guardians who were either experts in the care of London or willing to engage expert advice. Touching on minor points of detail in which architecture, town planning, and by-laws might be affected by the new ideas introduced by the war, the lecturer concluded by considering the effect of architecture on war and the style of the future. Under the former heading he dwelt on the spiritual or sentimental effect of architecture in that mysterious virtue of patriotism, which—rather than commercial instinct—is the true mainspring of defensive war in a Christian people. The latter topic he debated in special reference to that essential element of all good architecture—viz., that which binds it inevitably to its own past.

"The Growth and Overgrowth of Towns" were dealt with in the second lecture, delivered on the 7th December. It was pointed out that nearly all large cities were the result of the expansion or agglomeration of original small towns—consequently, since the requirements of a large

modern city are essentially different from those of a small mediæval town or primitive hamlet, it could only be by a sort of accident that any modern towns of large size fulfilled the requirements of its many inhabitants. Tracing the normal historical growth of a village or town, and explaining the extent to which roads acted both as cause and effect in town development the lecturer illustrated his line of argument by special reference to London. The possibilities of improvement by drastic remodelling were touched upon, the plans prepared by Evelyn and Wren for the reformation of Central London after the Great Fire being given as examples. Showing a slide of Wren's scheme as applied to London to-day, the lecturer criticised the faults into which even a man of Wren's foresight could fall through insufficient prescience of the coming needs and growing greatness of the Metropolis. Certain main principles of plan which should dominate the remodelling of congested cities of large size were dwelt upon as a preliminary study to the following lecture:

"London of the Future" was the subject of the third lecture, delivered on the 14th December. The lecturer explained that he was no advocate of change for the sake of change. His heart said "Leave London alone"; but his head made answer: "London will change whether we like it or not, and it is someone's duty—i.e. our own duty—to see that the changes are not governed by the disorder of hazard but by the skilful premeditation which makes for order, economy, beauty, and unity of purpose." Glancing first at the road problem the lecturer dealt with one or two solutions of the best known difficulties. He next discussed some aspects of the railway question, including specially the positions and number of the necessary termini, and followed with a brief survey of certain aspirations which have of recent years been expressed in regard to the inevitable amelioration of the district adjoining the Surrey shore. An urgent appeal was made in favour of some form of definite woodland and grassland girdle round the strictly urban portion of the town. Acknowledging that he differed from some experts as to the radius which such a circle should take, he indicated by means of a specially prepared map how largely the way was already prepared for such a reform and how greatly it would, while providing a valuable position for a circuit road, substitute beauty for ugliness in certain districts. A caution on what Mr. Waterhouse called "The disgrace of bad design" concluded the lecture.

Architectural Refinements in Modern Buildings.

The *Brooklyn Museum Quarterly* has published recently some interesting notes recording the introduction of certain architectural refinements into buildings lately erected or in course of erection. Two examples are cited—one in America and one at Newport in Ireland. These refinements are stated to be based on the theories advanced by Mr. William H. Goodyear and illustrated in the Brooklyn Museum collection of architectural photographs which were exhibited at Edinburgh in 1906 and at Dublin in 1914. The architect of the Newport building—a church—is Mr. R. M. Butler [F.], editor of *The Irish Builder*. Among the refinements introduced are the sloping upward of the floor of nave and aisles; the convergence in plan of the nave in its length from west to east; variations in dimensions of the bays of the nave arcade; and the widening refinement, "consisting of an outward vertical divergence of the walls of the nave, amounting to 6 inches to the side."

A second example is at the Swedenborgian church at

Bryn Athyn, near Philadelphia, where Messrs. Cram & Ferguson have employed curves in plan in the alignment of the arcades of the nave. Mr. Cram gives the following details: "The floor slopes upward from the entrance of the chancel. The nave piers are on an alignment slightly concave to the centre of the nave, so that near the second bay the church is 14 inches wider than it is at the ends of the nave, and the 'horizontal' of the cornices, parapets, etc., above the arcades, are not horizontal at all, but are slightly convex in the vertical planes, thus exhibiting bends in elevation, with a total deflection of about 6 inches to a side. This bend of the horizontals in the vertical plane begins in the line of the arcade capitals. The second crossing arch is a foot higher than the first. At the entrance to the sanctuary the vertical lines are inclined outward $2\frac{1}{2}$ inches to a side in a height of 25 feet. The spacings of the piers are all varied, not only as regards the relations of each successive arcade on a given side of the church as compared with the arcade preceding or following, but the arcade spacing is also varied as compared with the arcade directly opposite in the opposite line. There is also a bend in plan, convex to the exterior, in the façade; the sides of the façade corresponding to the aisle widths slant backward in plan, so that the angles of the façade are 6 inches back of a line parallel with the central front. In a great number of other particulars, persistent effort has been made to break up and dispel the monotonous appearance of mathematical and geometric regularity."

A third example is called attention to in the new buildings of the Massachusetts Institute of Technology, described by the architect, Mr. William Welles Bosworth, of New York City, in *The American Architect* for the 26th July last. Mr. Bosworth mentions that the sky-lines of the various courts "are all curved, following out the theories revived so vigorously by Professor Wm. H. Goodyear. The columns of the main portico are also set on a forward curve on plan, as may be seen in one of the illustrations."

George Edmund Street's Draughtsmen [p. 48].

Mr. HENRY LOVEGROVE [A.] writes:—

Mr. W. Rushworth mentions Mr. Harry G. Drinkwater as one of the three draughtsmen working on the drawings submitted for the Edinburgh Cathedral Competition, and I should like to add that Mr. Drinkwater and myself were pupils at the same time, but in different offices, in the City of Oxford. We were friends during his study in London, and after he returned to Oxford until his death. I very much admired his drawings, and feel sure that had he lived he would have made a name in the profession.

COMPETITIONS.

Federal Parliament Buildings, Canberra.

A letter dated 25th November addressed to the President from the Office of the High Commissioner for Australia in London states that the Commissioner has received a cablegram from the Prime Minister of Australia announcing that the Competition for the Federal Parliament Buildings at Canberra has been indefinitely postponed.

The action taken by the Institute in its efforts to bring about this result is recorded in the JOURNAL for 30th September and 11th November.

THE EXAMINATIONS.

The Final: Alternative Problems in Design.

Instructions to Candidates.

1. The drawings, which should preferably be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, AND HIS FULL NAME AND ADDRESS, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the Student that the design is his own work and that the drawings have been wholly executed by him. In the preparation of the design the Student may profit by advice.

4. Drawings for subjects (a) are to have the shadows projected at an angle of 45° in line, monochrome, or colour. Drawings in subjects (b) are to be finished as working drawings. Lettering on all drawings must be of a clear, scholarly, and unaffected character.

Subject XXXI.

(a) A CHAPEL, WITHOUT AISLES, OPENING OUT OF THE SOUTH SIDE OF A MODERN CATHEDRAL. To be about the width of one bay of the nave, viz., 36 feet, centre to centre. Height to springing of chapel vault about 40 feet. Entrance to chapel is to be through a screen from the nave of the cathedral.

Drawings.—Plan and two sections to $\frac{1}{4}$ -inch scale, and details of part of screen to 1-inch scale.

(b) In a country town there is an island site about 90 feet by 40 feet, and it is decided to erect on this a TWO-STORY BUILDING, consisting of SHOPS on the lower floor, and a CONCERT HALL, with its appurtenances, on the upper floor. The hall is to have a gallery at one end.

Drawings.—Two plans, two elevations, and one cross section to $\frac{1}{8}$ -inch scale; $\frac{1}{4}$ -inch scale drawing of part of the longitudinal section showing the construction of the gallery.

Subject XXXII.

(a) A SHIPPING COMPANY'S OFFICES TO BE BUILT ON AN ISLAND SITE ON A QUAY AT A BIG PORT. The site, 80 ft. by 72 ft., including an area 6 feet wide on three sides of the building to light the basement. Ground floor to consist mainly of one large Hall containing the various offices, which need not be shown in detail. One main entrance and one back entrance. Stairs, passenger and goods lifts. Basement will provide for storage and heating, lavatories and cloak-rooms, and all the rest of the building to consist of offices.

It is to be a good practical building, carefully studied as regards light and convenience, and it will be well seen on all sides. A clock in the turret is desirable.

Drawings.—Ground and first floors—one or two elevations and a section required, all to a scale of 8 feet to 1 inch.

(b) A COVERED MARKET AT A SEASIDE TOWN. Size of site 100 feet square, open to streets on three sides, the fourth side being adjacent buildings. The market may be one or two storeys in height.

Drawings.—A ground plan, one elevation and one section to $\frac{1}{8}$ -inch scale, and details of important parts to $\frac{1}{4}$ -inch scale.

Subject XXXIII.

(a) A COLLEGE QUADRANGLE, 100 FEET SQUARE, with a

cloister all round, and a Library over the cloister on one side. Three storeys of Students' rooms on the other three sides.

Drawings.—Two plans and two sections through the whole building, one of which must show the elevation of the Library. All these drawings to $\frac{1}{8}$ -inch scale. Also a sheet of details of Library to $\frac{1}{2}$ -inch scale.

(b) A WORKING DETAIL to a scale of $1\frac{1}{2}$ in. to a foot of the Main Entrance doorway and lobby, to such a building as the before-mentioned Shipping Offices, with stonework, joinery, etc., completely drawn ready for the builder's use.

Dates for Submission of Designs in 1917.

	Subject XXXI.	Subject XXXII.	Subject XXXIII.
United Kingdom	27th Feb.	30th April	30th June
Johannesburg	30th April	30th June	31st Aug.
Melbourne	30th May	31st July	29th Sept.
Sydney	30th May	31st July	29th Sept.
Toronto	31st March	30th May	31st July

MINUTES.

At the Second General Meeting (Business) of the Session 1916-1917, held Monday, 18th December 1916, at 4.15 p.m.—Present, Mr. E. Guy Dawber, Hon. Secretary, in the Chair; 16 Fellows (including 7 members of the Council) and 4 Associates (including 1 member of the Council)—the Minutes of the meeting held November 1916, having been already published, were taken as read and signed as correct.

It was announced that since the last meeting news had been received that the following members had fallen in the War:—2nd Lieut. Arthur Alderson France, Royal Engineers, *Fellow*; Lieut. George Augustus Bligh Livesay, South Wales Borderers, *Fellow*; Captain Arthur Michael Durrant, *Associate*; Private Henry Franklin Paterson, Hon. Artillery Company, *Probationer*, son of Mr. H. L. Paterson of Sheffield, *Associate*; Private Arthur Cyril Candwell, Queen Victoria's Rifles, *Licentiate*; 2nd Lieut. Walter R. Westwood, Royal Field Artillery, *Student*.

On the motion of the Chairman it was Resolved that the deepest regrets of the Institute be entered on the Minutes for the loss of these gallant members, and that a message of sympathy and condolence be forwarded to their nearest relatives.

It was also Resolved that a vote of sympathy and condolence be passed to the following members whose sons have recently fallen:—Mr. Andrew Balfour, *Fellow*; Mr. Joseph Sawyer, *Fellow*; Mr. Charles W. Bowles, *Fellow*; Mr. F. T. W. Goldsmith, *Fellow*; Mr. C. H. Strange, *Associate*; Mr. R. H. Kerr, *Fellow*.

The decease was also announced of Edward Cratney, *Fellow*; Harold Beckwith Richards, *Associate*; Charles Robert Baker King, the *doyen* of the *Associate* class, having been elected in 1862; William Wallace Blair, *Licentiate*; Charles William Bell, *Licentiate*; John Hebb, *Retired Fellow*.

The decease was further announced of the Marquis de Vogüé, *Hon. Corresponding Member*, France, and the Chevalier Victor Eugène Louis de Stuers, *Hon. Corresponding Member*, Holland; and it was Resolved that the Institute do record its regret at the loss of its distinguished Corresponding Members, and that a letter of sympathy be addressed to their relatives.

The following candidates were elected by show of hands under By-law 9:—

AS FELLOWS (8).

CHATTERTON: FREDERICK [*Associate*, 1896], Cairo.
EDWARDS: ARTHUR CECIL MORRIS [*Associate*, 1908], Bexhill.
REAVELL: GEORGE [*Associate*, 1899], Alnwick.
Together with the following Licentiates who have passed the Qualifying Examination:—
ALDER: JOHN SAMUEL.
ALSO: RODNEY HOWARD, Melbourne.
FERRIER: CLAUDE WATERLOW.

GORDON: WALTER SYMINGTON ATHOL.
LEY: ALGERNON SYDNEY RICHARD.

AS ASSOCIATES (12).

ARMSTRONG: JOHN RAMSAY, Perth.
BRANDON: CHARLES JOSEPH.
ELLISON: ROBERT KITCHING, Bedford.
FOULKES: SIDNEY COLWYN, Colwyn Bay.
HOLMAN: ARTHUR ROWLAND, Exeter.
HUTTON: LORNE DE HUTTON.
KEEP: NORMAN PRISTO.
LOWRY: ROBERT.
LUYKEN: HEINRICH MARTIN.
SPARROW: ARTHUR JOHN.
TODD: HAROLD EDGAR, Bristol.
WILSON: JAMES FREDERICK, Newport, Mon.

It was announced that the following candidates for the Fellowship had been nominated for election—viz., Charles Septimus Errington [*A.*, 1815], Frank Stanley Swash [*A.*, 1912], Wilfrid Irwin Travers [*A.*, 1906].

The proceedings then closed and the Meeting terminated at 4.25 p.m.

NOTICES.

THE THIRD GENERAL MEETING (BUSINESS) of the Session 1916-17 will be held Monday, 8th January 1917, when the Chair will be taken at 4.0 o'clock p.m. precisely, for the following purposes:—

To read the Minutes of the General Meeting (Ordinary) held Monday, 18th December 1916; formally to admit members attending for the first time, &c.

To proceed with the election of the following candidates for membership under By-laws 8, 9, and 10:

AS FELLOWS (3).

ERRINGTON: CHARLES SEPTIMUS [*Associate*, 1895], Victoria Buildings, Grainger Street West, Newcastle-upon-Tyne; Benwell Grove Lodge, Newcastle-upon-Tyne.

Proposers: R. Burns Dick, Henry C. Charlewood, and Joseph Oswald.

SWASH: FRANK STANLEY [*Associate*, 1912], Field's Park Avenue, Newport, Mon.

Proposers: Chas. F. Ward, John Francis Groves, and the Council.

TRAVERS: WILFRID IRWIN [*Associate*, 1906], Lieut. R.E.; c/o Bernard MacDonald, 34 Avonmore Road, W.
Proposers: Sir Aston Webb, R.A., Max Clarke, and Edw. Greenop.

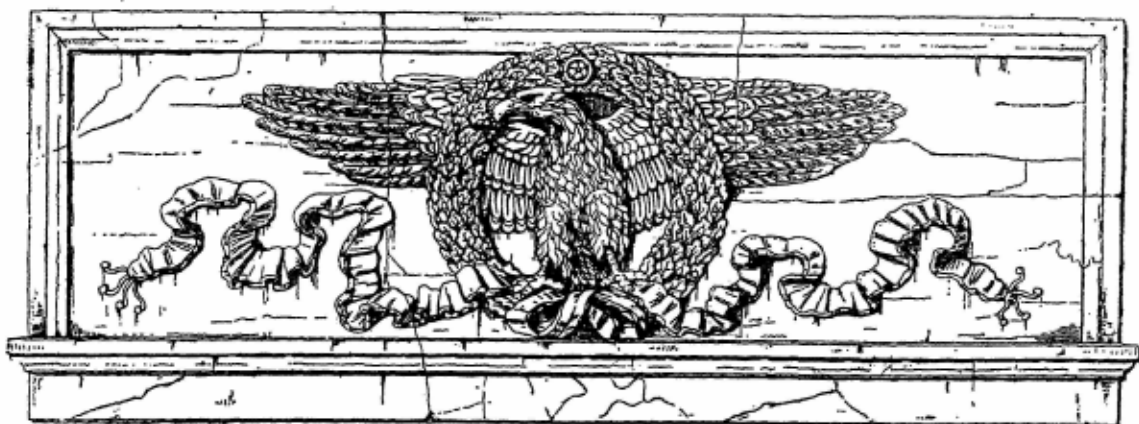
On View in the Common Room, Dec. 18-31.

A SERIES OF DRAWINGS OF SOME OF THE FINEST EXAMPLES OF INDIAN ARCHITECTURE of about the fifteenth and sixteenth centuries, measured and drawn during his study tours by Mr. E. C. HENRIQUES, Government of India Scholar in Architecture.

The drawings illustrate the three principal styles of Saracenic Architecture in India—identified with the Mogul Dynasty at Agra, in the North; the Ahmed-shahi Dynasty at Ahmedabad and Champanir, in the West; and the Adilshahi Dynasty at Bijapur, in the South. Some Hindoo examples at Rajputana are also included.

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THE AISLE VAULTING OF WINCHESTER TRANSEPT.

By JOHN BILSON [F.], F.S.A.

THE recent publication in this JOURNAL * of my friend Professor Charles H. Moore's admirable analysis of the aisle vaulting of Winchester transept suggests that it may be of interest to publish, with some explanatory notes, a drawing of the vaulting of one bay which I made eleven years ago, but have not hitherto published.

First, however, I should like to clear up two small points upon which the readers of Professor Moore's paper might possibly imagine that there was some difference between what he says and what I wrote in a paper published in this JOURNAL in 1899, though no such difference exists.

Professor Moore quotes (p. 314) my statement that "in the reconstructed bays . . . the vaults were entirely rebuilt as ribbed vaults," and goes on to say that I qualified this by remarking that "in the northernmost bay of the east aisle of the north transept, which would not be affected by the fall of the tower, the vault itself does not appear to have been rebuilt, but the ribs seem to have been added under the original vault, and are backed out up to the groins." † This, however, is not a reconstructed bay, and I was more immediately interested in the vaulting of the bays which were entirely rebuilt after the fall of the central tower in 1107, adding a footnote in correction of a slip in Professor Willis's description. On referring to my notes, I find that they entirely agree with what Professor Moore says (p. 314), and that I grouped the vaults thus :—

Original vaults.‡ North transept : the two bays under the tribune ; and the first and second bays (counting from the north) of the western aisle. South transept : the two bays under the tribune.

Original vaults, with twelfth-century ribs added. North transept : the first bay of the eastern aisle.§ South transept : the first || and second bays (counting from the south) of the eastern aisle. With later ribs added, the second bay of the eastern aisle of north transept.

Twelfth-century vaults. North transept : the third bay in the eastern aisle, and the third bay in the western aisle. South transept : the third bay in the eastern aisle, and the first, second, and third bays in the western aisle.¶

Professor Moore (p. 315) quotes my remark ** that "the haunches of the vault, for a short distance above the springing, are constructed of ashlar," and he suggests that this is an inadvertence. It is hardly that, though perhaps I must plead guilty to a loose use of the word "haunch."†† But I

* Third Series, Vol. XXIII. pp. 313-320 and 329-334.

† *The Beginnings of Gothic Architecture*, in the R.I.B.A. JOURNAL, Third Series, Vol. VI., pp. 301-2.

‡ The building of the cathedral was begun in 1079, and the monks entered in 1093.

§ Professor Moore's B, Fig. 1, p. 314.

Third Series, Vol. XXIV. No. 5.—13 Jan. 1917.

|| Professor Moore's Fig. 10, p. 330.

¶ The above was written before I had seen Professor Moore's letter in the JOURNAL for 11th November, p. 16.

** *Beginnings*, p. 293.

†† The *N.E.D.* defines "haunch" as "the side of an arch between the crown and the piers, the flank."

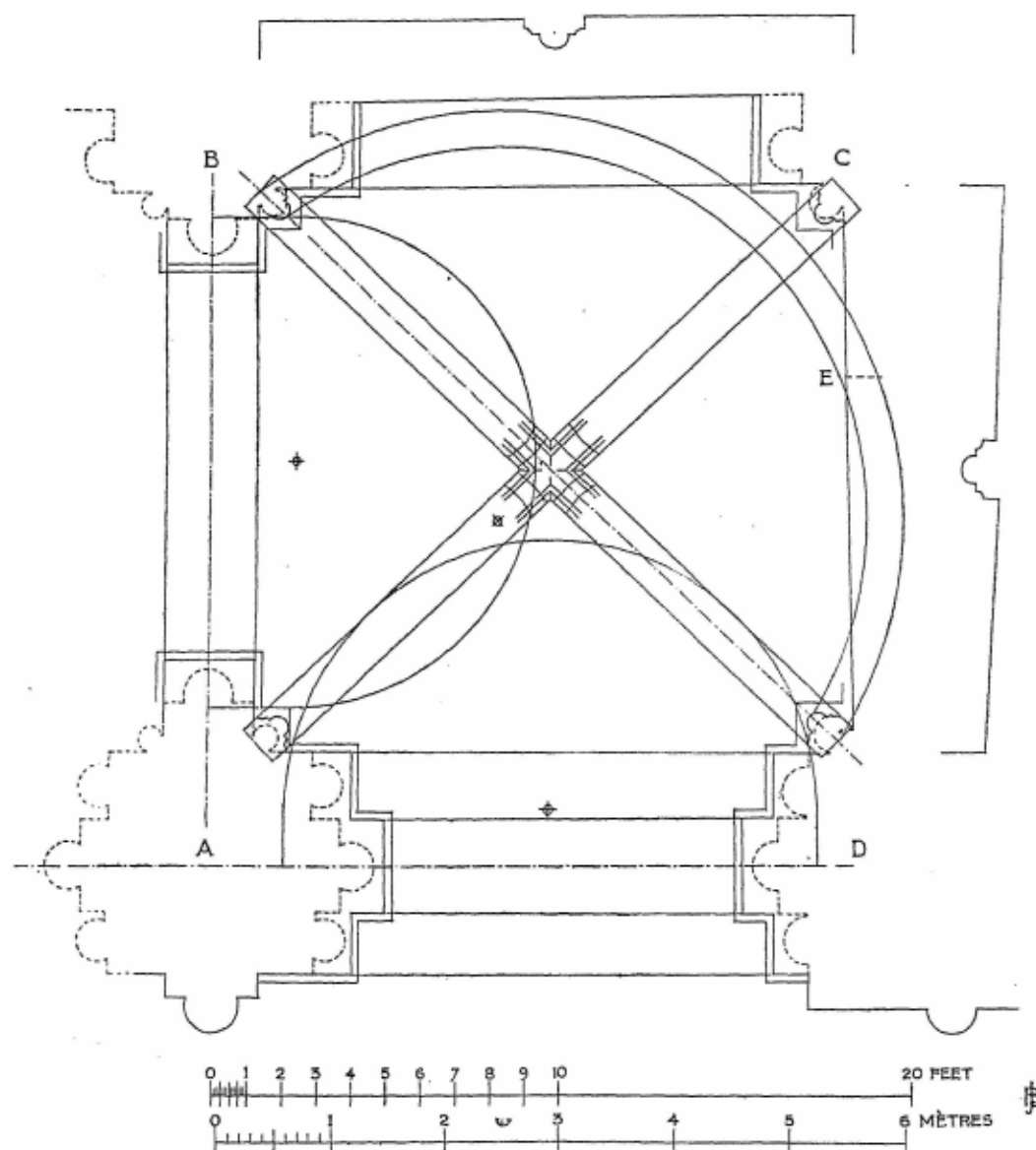


FIG. 1.—WINCHESTER, EAST AISLE OF NORTH TRANSEPT, THIRD BAY FROM NORTH: PLAN OF VAULT.



(Chas. E. S. Beloe, Phot., Winchester.)

FIG. 2.—WINCHESTER, NORTH TRANSEPT, EAST AISLE, THIRD BAY FROM NORTH, LOOKING SOUTH.

ARCHITECTURAL ACOUSTICS.

By WALLACE C. SABINE, Sc.D., Dean, The Graduate School of Applied Science,
Harvard University.

[The Royal Institute is indebted to the Board of Management of the Franklin Institute for permission to reprint this Paper from their Journal, and for kindly lending the blocks of the illustrations.]

BECAUSE familiarity with the phenomena of sound has so far outstripped the adequate study of the problems involved, many of them have been popularly shrouded in a wholly unnecessary mystery. Of none, perhaps, is this more true than of architectural acoustics. The conditions surrounding the transmission of speech in an enclosed auditorium are complicated, it is true, but are only such as will yield an exact solution in the light of adequate data. It is, in other words, a rational engineering problem.

The problem of architectural acoustics is necessarily complex, and each room presents many conditions which contribute to the result in a greater or less degree, according to circumstances. To take justly into account these varied conditions, the solution of the problem should be quantitative, not merely qualitative; and to reach its highest usefulness and the dignity of an engineering science it should be such that its application can precede, not merely follow, the construction of the building.

In order that hearing may be good in any auditorium it is necessary that the sound should be sufficiently loud, that the simultaneous components of a complex sound should maintain their proper relative intensities, and that the successive sounds in rapidly moving articulation, either of speech or of music, should be clear and distinct, free from each other and from extraneous noises. These three are the necessary, as they are the entirely sufficient, conditions for good hearing. Scientifically the problem involves three factors: reverberation, interference, and resonance. As an engineering problem it involves the shape of the auditorium, its dimensions, and the materials of which it is composed.

Sound, being energy, once produced in a confined space, will continue until it is either transmitted by the boundary walls or is transformed into some other kind of energy, generally heat. This process of decay is called absorption. Thus, in the lecture-room of Harvard University, in which, and in behalf of which, this investigation was begun, the rate of absorption was so small that a word spoken in an ordinary tone of voice was audible for five and a half seconds afterwards. During this time even a very deliberate speaker would have uttered the twelve or fifteen succeeding syllables. Thus the successive enunciations blended into a loud sound, through which and above which it was necessary to hear and distinguish the orderly progression of the speech. Across the room this could not be done; even near the speaker it could be done only with an effort wearisome in the extreme if long maintained. With an audience filling the room the conditions were not so bad, but still not tolerable. This may be re-

garded, if one so chooses, as a process of multiple reflection from walls, from ceiling, and from floor, first from one and then another, losing a little at each reflection until ultimately inaudible. This phenomenon will be called reverberation, including, as a special case, the echo. It must be observed, however, that, in general, reverberation results in a mass of sound filling the whole room and incapable of analysis into its distinct reflections. It is thus more difficult to recognise and impossible to locate. The term "echo" will be reserved for that particular case in which a short, sharp sound is distinctly repeated by reflection, either once from a single surface, or several times from two or more surfaces. In the general case of reverberation we are concerned only with the rate of decay of the sound. In the special case of the echo we are concerned not merely with its intensity, but with the interval of time elapsing between the initial sound and the moment it reaches the observer. In the room mentioned as the occasion of this investigation no discrete echo was distinctly perceptible, and the case will serve excellently as an illustration of the more general type of reverberation. After preliminary gropings, first in the literature and then with several optical devices for measuring the intensity of sound, all established methods were abandoned. Instead, the rate of decay was measured by measuring what was inversely proportional to it—the duration of audibility of the reverberation, or, as it will be called here, the duration of audibility of the residual sound. These experiments may be explained to advantage here, for they will give more clearly than would abstract discussion an idea of the nature of reverberation. Broadly considered, there are two, and only two, variables in a room—shape (including size) and materials (including furnishings). In designing an auditorium an architect can give consideration to both; in repair work for bad acoustic conditions it is generally impracticable to change the shape, and only variations in materials and furnishings are allowable. This was, therefore, the line of work in this case. It was evident that, other things being equal, the rate at which the reverberation would disappear was proportional to the rate at which the sound was absorbed. The first work, therefore, was to determine the relative absorbing power of various substances. With an organ pipe as a constant source of sound, and a suitable chronograph for recording, the duration of audibility of a sound after the source had ceased in this room when empty was found to be 5.62 seconds. All the cushions from the seats in Sanders Theatre were then brought over and stored in the lobby. On bringing into the lecture-room a number of cushions, having a total length of 8.2 metres, the

duration of audibility fell to 5.33 seconds. On bringing in 17 metres the sound in the room after the organ pipe ceased was audible for but 4.94 seconds. Evidently the cushions were strong absorbents and rapidly improving the room, at least to the extent of diminishing the reverberation. The result was interesting and the process was continued. Little by little the cushions were brought into the room, and each time the duration of audibility was measured. When all the seats (436 in number) were covered, the sound was audible for 2.03 seconds. Then the aisles were covered, and then the platform. Still there were more cushions—almost half as many more. These were brought into the room, a few at a time, as before, and draped on a scaffolding that had been erected around the room, the duration of the sound being recorded each time. Finally, when all the cushions from a theatre seating nearly fifteen hundred persons

were placed in the room—covering the seats, the aisles, the platform, the rear wall to the ceiling—the duration of audibility of the residual sound was 1.14 seconds. This experiment, requiring, of course, several nights' work, having been completed, all the cushions were removed and the room was in readiness for the test of other absorbents. It was evident that a standard of comparison had been established. Curtains of chenille, 1.1 metres wide and 17 metres in total length, were draped in the room. The duration of audibility was then 4.51 seconds. Turning to the data that had just been collected, it appeared that this amount of chenille was equivalent to 30 metres of Sanders Theatre cushions. Oriental rugs (Herez, Demirjik, and Hindoostanee) were tested in a similar manner, as were also cretonne cloth, canvas, and hair-felt. Similar experiments, but in a smaller room, determined the absorbing power of a man and of a

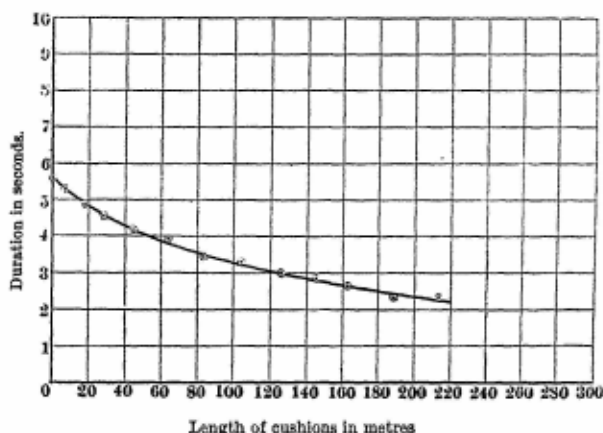


FIG. 1.—Curve showing the relation of the duration of the residual sound to the added absorbing material.

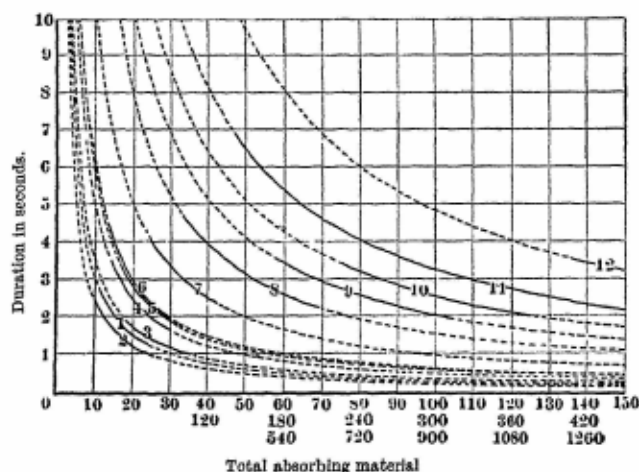


FIG. 3.—The curves of Figs. 8 and 9 entered as parts of their corresponding rectangular hyperbolas. Three scales are employed for the volumes by groups 1-7, 8-11, and 12.

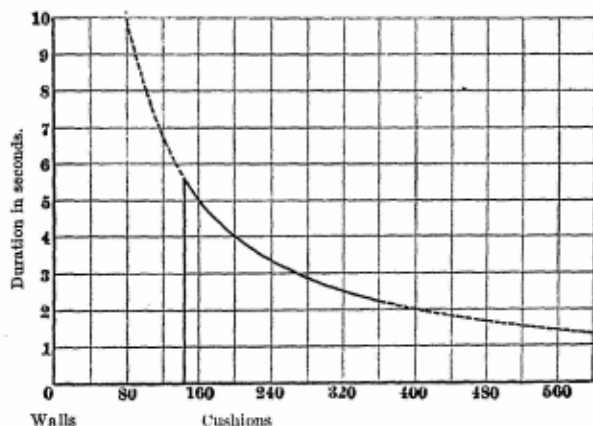


FIG. 2.—Curve 5 plotted as part of its corresponding rectangular hyperbola. The solid part was determined experimentally; the displacement of this to the right measures the absorbing power of the walls of the room.

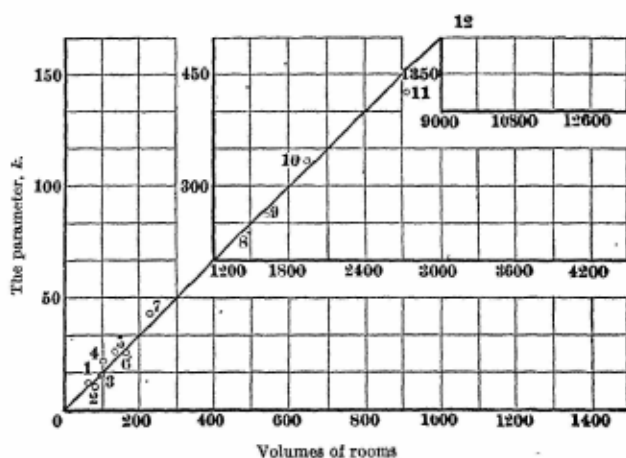


FIG. 4.—The parameters, k , plotted against the volumes of the rooms, showing the two proportional.

woman, always by determining the number of running metres of Sanders Theatre cushions that would produce the same effect. This process of comparing two absorbents by actually substituting one for the other is laborious, and it is given here only to show the first steps in the development of a method. Without going into details, it is sufficient here to say that this method was so perfected as to give not merely relative, but absolute, coefficients of absorption.

In this manner a number of coefficients of absorption were determined for objects and materials which could be brought into and removed from the room, for sounds having a pitch an octave above middle C. In the following table the numerical values are the absolute coefficients of the absorption:

Oil paintings, inclusive of frames	...	...	0.28
Carpet rugs	...	...	0.20
Oriental rugs, extra heavy	...	...	0.29
Cheese-cloth	...	...	0.019
Cretonne cloth	...	...	0.15
Shelia curtains	...	...	0.23
Hair felt, 2.5 cm. thick, 8 cm. from wall	...	...	0.78
Cork, 2.5 cm. thick, loose on floor	...	...	0.16
Linoleum, loose on floor	...	...	0.12

When the objects are not extended surfaces, such as carpets or rugs, but essentially spacial units, it is not easy to express the absorption as an absolute coefficient. In the following table the absorption of each object is expressed in terms of a square metre of complete absorption:

Audience, per person	...	...	0.44
Isolated woman...	...	...	0.54
Isolated man	...	...	0.48
Plain ash settees	...	...	0.039
Plain ash settees, per single seat	...	...	0.0077
Plain ash chairs, "bent wood"	...	...	0.0082
Upholstered settees, hair and leather	...	...	1.10
Upholstered settees, per single seat	...	...	0.28
Upholstered chairs, similar in style	...	...	0.30
Hair cushions, per seat...	...	...	0.21
Elastic-felt cushions, per seat	...	...	0.21

Of even greater importance was the determination of the coefficient of absorption of floors, ceilings, and wall surfaces. The accomplishment of this called for a very considerable extension of the method adopted. If the reverberation in a room as changed by the addition of absorbing material be plotted, the resulting curve will be found to be a portion of an hyperbola with displaced axes. An example of such a curve, as obtained in the lecture-room of the Fogg Art Museum, in Cambridge, is plotted in the diagram, Fig. 1. If now the origin of this curve be displaced so that the axes of coördinates are the asymptotes of the rectangular hyperbola, the displacement of the origin measures the initial absorbing power of the room, its floors, walls, and ceilings. Such experiments were carried out in a large number of rooms in which the different component materials entered in very different degrees, and an elimination between these different experiments gave the following coefficient of absorption for different materials:

Open window	...	...	1.000
Wood sheathing (hard pine)	...	...	0.061
Plaster on wood-lath	...	...	0.034
Plaster on wire-lath	...	...	0.033
Glass, single thickness	...	...	0.027
Plaster on tile	...	...	0.025
Brick set in Portland cement	...	...	0.025

If the experiments in these rooms are plotted in a single diagram, the result is a family of hyperbolæ showing a very interesting relationship to the volumes of the rooms. Indeed, if from these hyperbolæ the parameter, which equals the product of the coördinates, be determined, it will be found to be linearly proportional to the volume of the room. These results are plotted in Fig. 4, showing how strict the proportionality is even over a very great range in volume. We have thus at hand a ready method of calculating the reverberation for any room, its volume and the materials of which it is composed being known.

The first five years of the investigation were devoted to violin C, the C an octave above middle C, having a vibration frequency of 512 vibrations per second. This pitch was chosen because, in the art of telephony, it was regarded at that time as the characteristic pitch determining the conditions of articulate speech. The planning of Symphony Hall in Boston forced an extension of this investigation to notes over the whole range of the musical scale, three octaves below and three octaves above violin C.

In the very nature of the problem, the most important datum is the absorption coefficient of an audience, and the determination of this was the first task undertaken. By means of a lecture on one of the recent developments of physics, wireless telegraphy, an audience was thus drawn together and at the end of the lecture requested to remain for the experiment. In this attempt the effort was made to determine the coefficients for the five octaves from C₁₂₈ to C₂₀₄₈, including notes E and G in each octave. For several reasons the experiment was not a success. A threatening thunderstorm made the audience a small one, and the sultriness of the atmosphere made open windows necessary, while the attempt to cover so many notes, thirteen in all, prolonged the experiment beyond the endurance of the audience. While this experiment failed, another the following summer was more successful. In the year that had elapsed the necessity of carrying the investigation further than the limits intended became evident, and now the experiment was carried from C₆₄ to C₄₀₉₆, but included only the C notes, seven notes in all. Moreover, bearing in mind the experiences of the previous summer, it was recognised that even seven notes would come dangerously near overtaxing the patience of the audience. Inasmuch as the coefficient of absorption for C₅₁₂ had already been determined six years before, in the investigations mentioned, the coefficient for this note was not redetermined. The experiment was therefore carried out for the lower three and the upper three notes of the seven. The audience on the night of the

experiment was much larger than that which came the previous summer, the night was a more comfortable one, and it was possible to close the windows during the experiment. The conditions were thus fairly satisfactory. In order to get as much data as possible, and in as short a time, there were nine observers stationed at different points in the room. These observers, whose kindness and skill it is a pleasure to acknowledge, had prepared themselves, by previous practice, for this one experiment. The results of the experiment are shown on the lower curve in Fig. 5. This curve gives the coefficient of absorp-

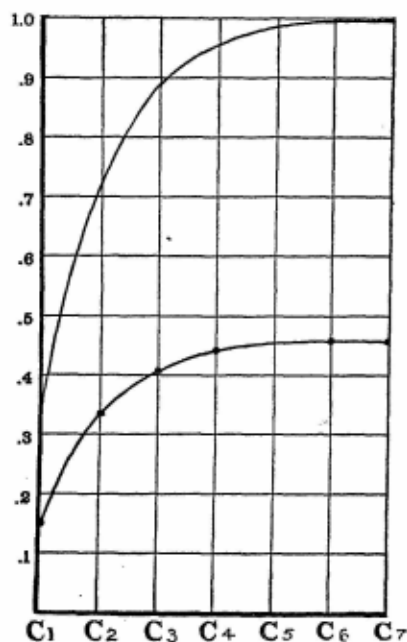


FIG. 5.—The absorbing power of an audience for different notes. The lower curve represents the absorbing power of an audience per person. The upper curve represents the absorbing power of an audience per square metre as ordinarily seated. The vertical ordinates are expressed in terms of total absorption by a square metre of surface. For the upper curve the ordinates are thus the ordinary coefficients of absorption. The several notes are at octave intervals, as follows: C₁ 64, C₂ 128, C₃ (middle C) 256, C₄ 512, C₅ 1024, C₆ 2048, C₇ 4096.

tion per person. It is to be observed that one of the points falls clearly off the smooth curve drawn through the other points. The observations on which this point is based were, however, much disturbed by a street car passing not far from the building, and the departure of this observation from the curve does not indicate a real departure in the coefficient, nor should it cast much doubt on the rest of the work, in view of the circumstances under which it was secured. Counteracting the, perhaps, bad impression which this point may give, it is a considerable satisfaction to note how accurately the point for C₅ 1024, determined six years before by a different set of observers, falls on the smooth curve through the remaining points. In the audience on which these observations were taken there were 77 women and 105 men. The courtesy of the audience in remaining for the experiment and the really re-

markable silence which they maintained are gratefully acknowledged.

The next experiment was on the determination of the absorption of sound by wood sheathing. It is not an easy matter to find conditions suitable for this experiment. The room in which the absorption by wood sheathing was determined in the earlier experi-

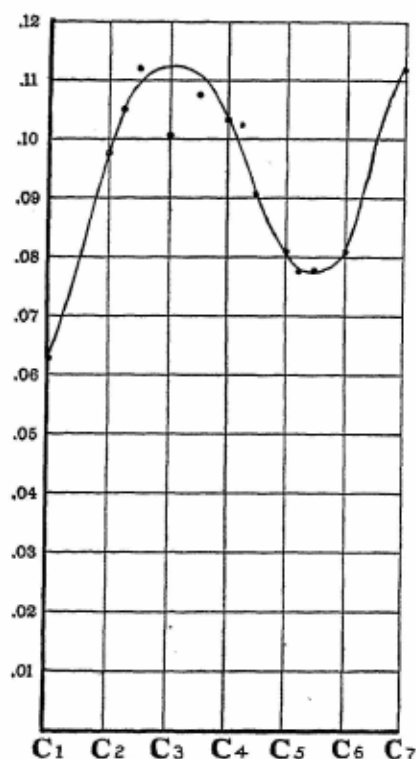


FIG. 6.—The absorbing power of wood sheathing, two centimetres thick, North Carolina pine. The observations were made under very unsuitable conditions. The absorption is here due almost wholly to yielding of the sheathing as a whole, the surface being shellacked, smooth and non-porous. The curve shows one point of resonance within the range tested, and the probability of another point of resonance above. It is not possible now to learn as much in regard to the framing and arrangement of the studding in the particular room tested as is desirable. C₃ (middle C) 256.

ments was not available for these. It was available then only because the building was new and empty. When these more elaborate experiments were under way the room became occupied, and in a manner that did not admit of its being cleared. Quite a little searching in the neighbourhood of Boston failed to discover an entirely suitable room. The best one available adjoined a night lunch-room. The night lunch was bought out for a couple of nights, and the experiment was tried. The work of both nights was much disturbed. The traffic past the building did not stop until nearly two o'clock, and began again at four. The interest of those passing on foot throughout the night, and the necessity of repeated explanations to the police, greatly interfered with the work. This detailed statement of the conditions under which the experiment was tried is made by way of explanation of the

irregularity of the observations recorded on the curve, and of the failure to carry this particular line of work further. The first night seven points were obtained for the seven notes C₁64 to C₂4096. The reduction of these results on the following day showed variations indicative of maxima and minima, which, to be accurately located, would require the determination of intermediate points. In the experiment the following night points were determined for the E and G notes in each octave between C₂128 and C₂2048. Other points would have been determined, but time did not permit. It is obvious that the intermediate points in the lower and in the higher octave were desirable, but no pipes were to be had on such short notice for this part of the range, and in their absence the data could not be obtained. In the diagram, Fig. 6, the points lying on the vertical lines were determined the first night. The points lying between the vertical lines were determined the second night. The accuracy with which these points fall on a smooth curve is, perhaps, all that could be expected in view of the difficulty under which the observations were conducted and the limited time available. One point in particular falls far off from this curve, the point for C₂256, by an amount which is, to say the least, serious, and which can be justified only by the conditions under which the work was done. The general trend of the curve seems, however, established beyond reasonable doubt. It is interesting to note that there is one point of maximum absorption, which is due to resonance between the walls and the sound, and that this point of maximum absorption lies in the lower part, though not in the lowest part, of the range of pitch tested. It would have been interesting to determine, had the time and facilities permitted, the shape of the curve beyond C₂4096, and to see if it rises indefinitely, or shows, as is far more likely, a succession of maxima.

The experiment was then directed to the determination of the absorption of sound by cushions, and for this purpose return was made to the constant temperature room. Working in the manner indicated in the earlier papers for substances which could be carried in and out of a room, the curves represented in Fig. 7 were obtained. Curve 1 shows the absorption coefficient for the Sanders Theatre cushions, with which the whole investigation was begun ten years ago. These cushions were of a particularly open grade of packing, a sort of wiry grass or vegetable fibre. They were covered with canvas ticking, and that, in turn, with a very thin cloth covering. Curve 2 is for cushions borrowed from the Phillips Brooks House. They were of a high grade, filled with long, curly hair, and covered with canvas ticking, which was, in turn, covered by a long nap plush. Curve 3 is for the cushions of Appleton Chapel, hair covered with a leatherette, and showing a sharper maximum and a more rapid diminution in absorption for the higher frequencies, as would be expected under such conditions. Curve 4 is probably the most interesting, because for more standard commercial conditions

ordinarily used in churches. It is to be observed that all four curves fall off for the higher frequencies, all show a maximum located within an octave, and three of the curves show a curious hump in the second octave. This break in the curve is a genuine phenomenon, as it was tested time after time. It is perhaps due to a secondary resonance, and it is to be observed that it is the more pronounced in those curves that have the sharper resonance in their principal maxima.

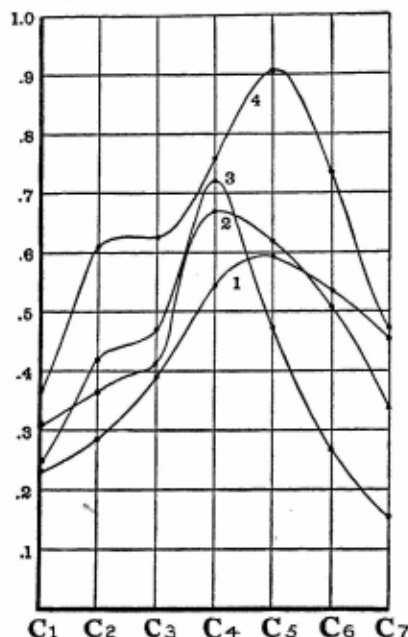


FIG. 7.—The absorbing power of cushions. Curve 1 is for "Sanders Theatre" cushions of wiry vegetable fibre, covered with canvas ticking and a thin cloth. Curve 2 is for "Brooks House" cushions of long hair, covered with the same kind of ticking and plush. Curve 3 is for "Appleton Chapel" cushions of hair, covered with ticking and a thin leatherette. Curve 4 is for the elastic felt cushions of commerce, of elastic cotton, covered with ticking and short nap plush. The absorbing power is per square metre of surface. C₂ (middle C) 256.

In both articulate speech and in music the source of sound is rapidly and, in general, abruptly changing in pitch, quality, and loudness. In music one pitch is held during the length of a note. In articulate speech the unit or element of constancy is the syllable. Indeed, in speech it is even less than the length of a syllable, for the open vowel sound which forms the body of a syllable usually has a consonantal opening and closing. During the constancy of an element, either of music or of speech, a train of sound waves spreads spherically from the source, just as a train of circular waves spreads outward from a rocking boat on the surface of still water. Different portions of this train of spherical waves strike different surfaces of the auditorium and are reflected. After such reflection they begin to cross each other's paths. If their paths are so different in length that one train of waves has entirely passed before the other arrives at a particular point, the only phenomenon at that point is prolongation of the sound. If the space between the two trains of waves be sufficiently great, the effect will be

that of an echo. If there be a number of such trains of waves thus widely spaced, the effect will be that of multiple echoes. On the other hand, if two trains of waves have travelled so nearly equal paths that they overlap, they will, dependent on the difference in length of the paths which they had travelled, either reinforce or mutually destroy each other. Just as two equal trains of water waves crossing each other may entirely neutralise each other if the crest of one and

The effect of this phenomenon is to produce regions in an auditorium of loudness and regions of comparative or even complete silence. It is a partial explanation of the so-called deaf regions in an auditorium.

It is not difficult to observe this phenomenon directly. It is difficult, however, to measure and record the phenomenon in such a manner as to permit of an accurate chart of the result. Without going into the details of the method employed, the result of these measurements for a room very similar to the Congregational Church in Naugatuck, Connecticut, is shown in the accompanying chart. The room experimented in was a simple, rectangular room with plain side walls and ends and with a barrel or cylindrical ceiling. The result is clearly represented in Fig. 8, in which the intensity of the sound has been indicated by contour lines in the manner employed in the drawing of the geodetic survey maps. The phenomenon indicated in these diagrams was not ephemeral, but was constant so long as the source of sound continued, and repeated itself with almost perfect accuracy day after day. Nor was the phenomenon one which could be observed merely instrumentally. To an observer moving about in the room it was quite as striking a phenomenon as the diagrams suggest. At the points in the room indicated as high maxima of intensity in the diagram the sound was so loud as to be disagreeable, at other points so low as to be scarcely audible. It should be added that this distribution of intensity is with the source of sound at the centre of the room. Had the source of sound been at one end and on the axis of the cylindrical ceiling, the distribution of intensity would still have been bilaterally symmetrical, but not symmetrical about the transverse axis.

When a source of sound is maintained constant for a sufficiently long time, a few seconds will ordinarily suffice: the sound becomes steady at every point in the room. The distribution of the intensity of sound under these conditions is called the interference system, for that particular note, of the room or space in question. If the source of sound is suddenly stopped, it requires some time for the sound in the room to be absorbed. This prolongation of sound after the source has ceased is called reverberation. If the source of sound, instead of being maintained, is short and sharp, it travels as a discrete wave or group of waves about the room, reflected from wall to wall, producing echoes. In the Greek theatre there was ordinarily but one echo, "doubling the case ending," while in the modern auditorium there are many, generally arriving at a less interval of time after the direct sound and therefore less distinguishable, but stronger and therefore more disturbing.

The formation and the propagation of echoes may be admirably studied by an adaptation of the so-called *schlieren-Method* device for photographing air disturbances. It is sufficient here to say that the adaptation of this method to the problem in hand consists in the construction of a model of the auditorium

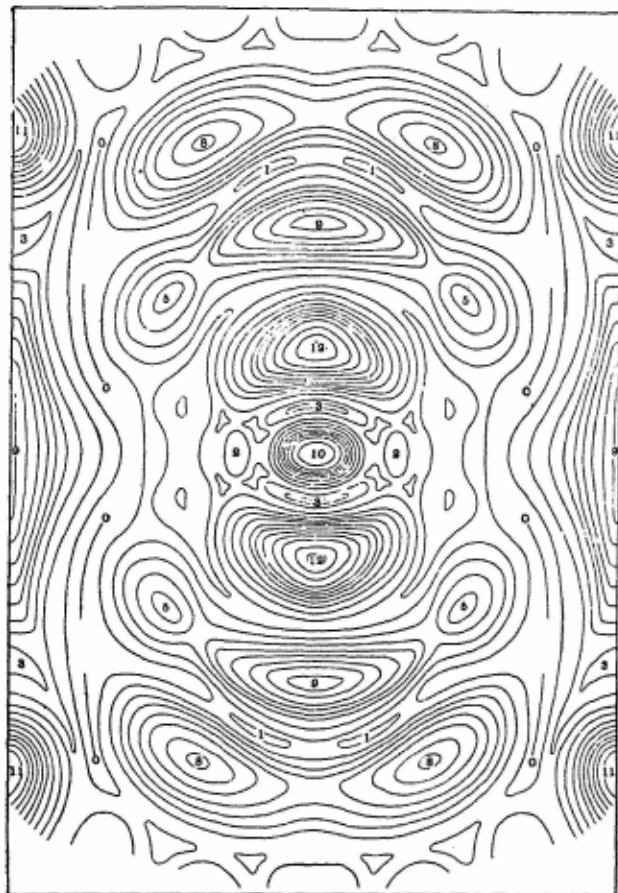


FIG. 8.—Distribution of intensity on the head level in a room with a barrel-shaped ceiling, with centre of curvature on the floor level.

the trough of the other arrive together, so two sounds, coming from the same source, in crossing each other may produce silence. This phenomenon is called interference, and is a common phenomenon in all types of wave motion. Of course, this phenomenon has its complement. If the two trains of water waves so cross that the crest of one coincides with the crest of the other and trough with trough, the effects will be added together. If the two sound waves be similarly retarded, the one on the other, their effects will also be added. If the two trains of waves be equal in intensity, the combined intensity will be quadruple that of either of the trains separately, as above explained, or zero, depending on their relative retardation.

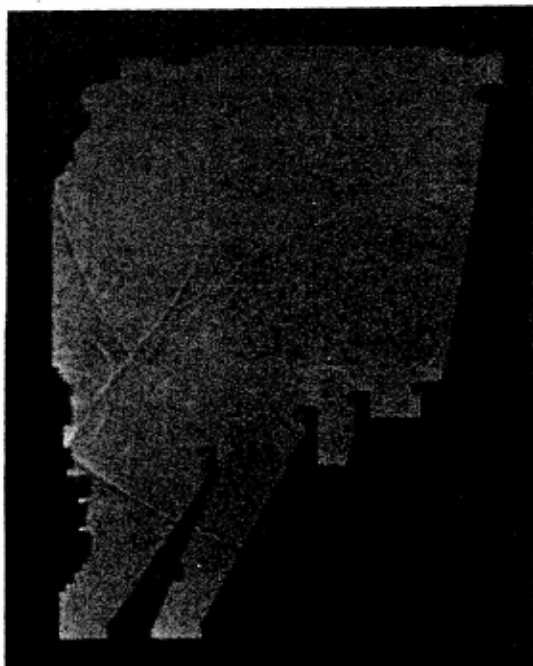


FIG. 11.

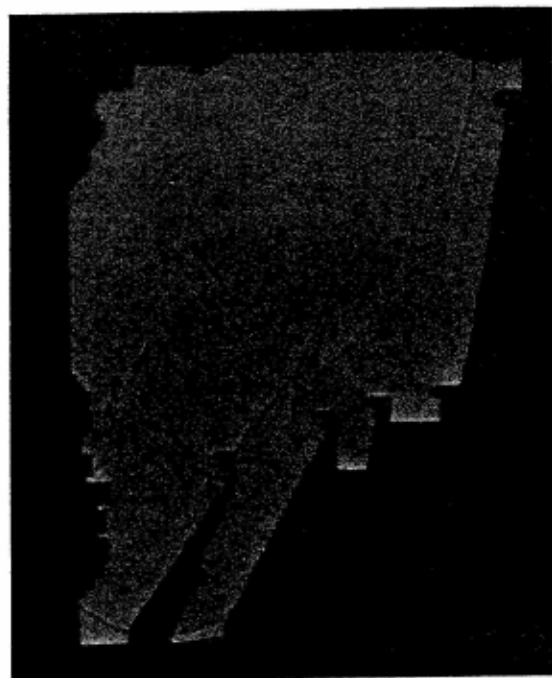


FIG. 12.

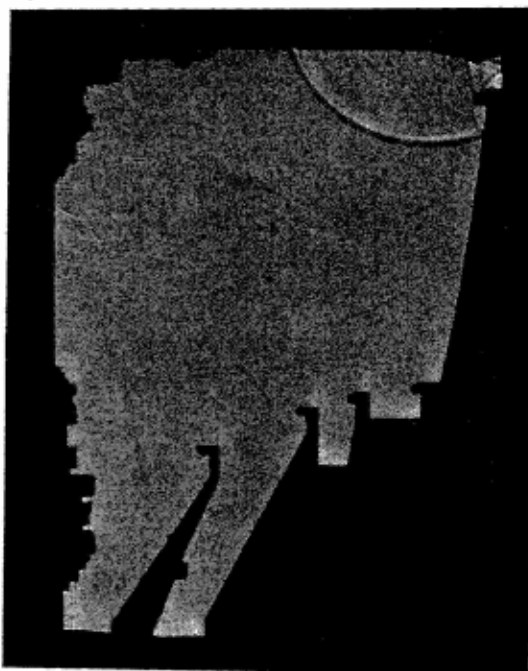


FIG. 9.

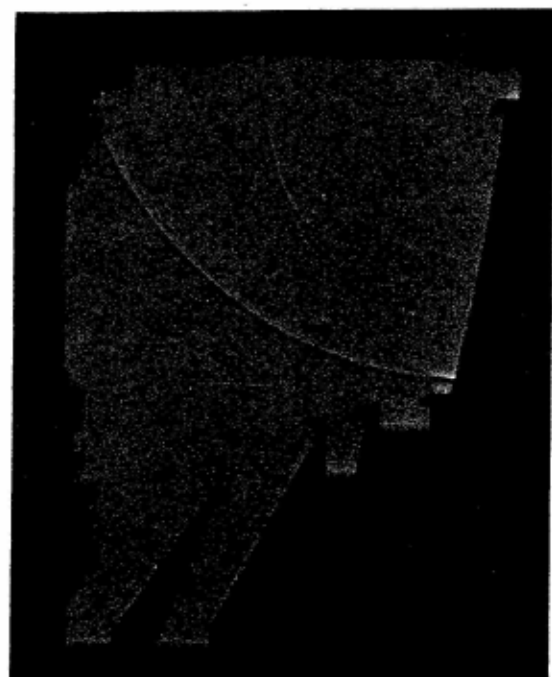


FIG. 10.

to be studied to proper scale, and investigating the propagation through it of a proportionately scaled sound wave. To examine the formation of echoes in a vertical section, the sides of a model are taken off and, as the sound is passing through it, it is illuminated instantaneously by the light from a very fine and somewhat distant electric spark. In the accompanying illustrations, reduced from the photographs, the enframing silhouettes are shadows cast by the model, and all within are direct photographs of the actual sound wave and its echoes. The four photographs show the sound and its echoes at different stages in their propagation through the room, the particular auditorium under investigation being the New Theatre in New York. It is not difficult to identify the master wave and the various echoes which it generates, nor, knowing the velocity of sound, to compute the interval at which the echo is heard.

To show the generation of echoes and their propagation in a horizontal plane, the ceiling and floor of the model are removed and the photograph taken in a vertical direction. The photographs shown in Figs. 13 to 16 show the echoes produced in the horizontal plane passing through the marble parapet in front of the box.

While these several factors, reverberation, interference, and echo, in an auditorium at all complicated are themselves complicated, nevertheless they are capable of an exact solution, or, at least, of a solution as accurate as are the architect's plans in actual construction. And it is entirely possible to calculate in advance of construction whether or not an auditorium will be good, and, if not, to determine the factors contributing to its poor acoustics and a method for their correction.

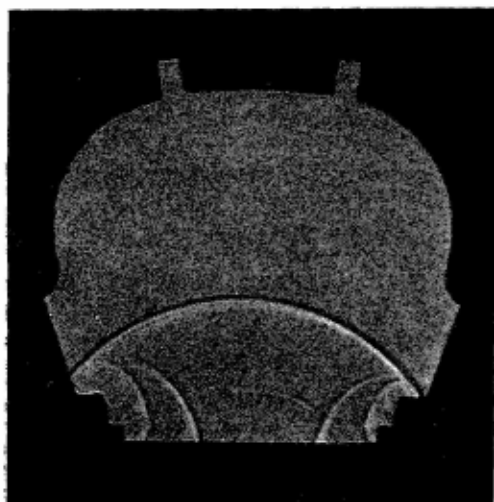


FIG. 13.

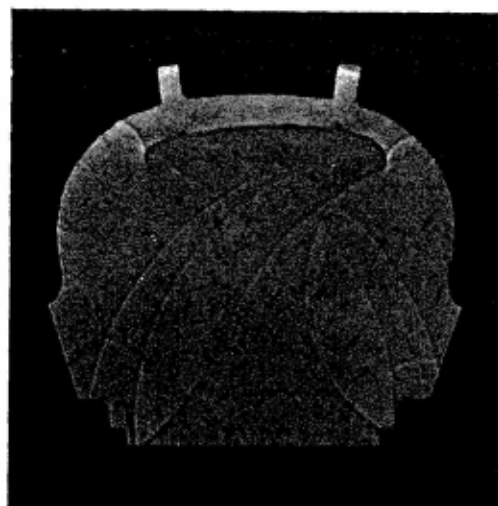


FIG. 14.

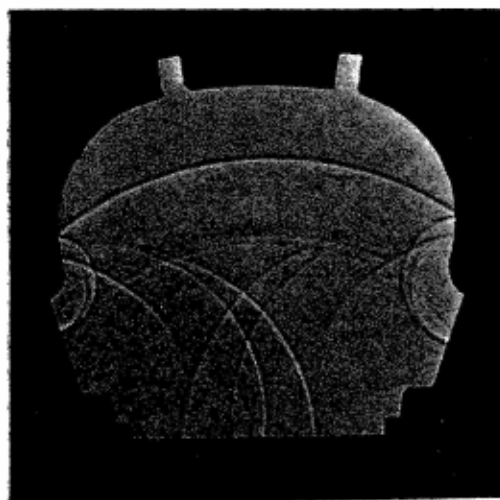


FIG. 15.

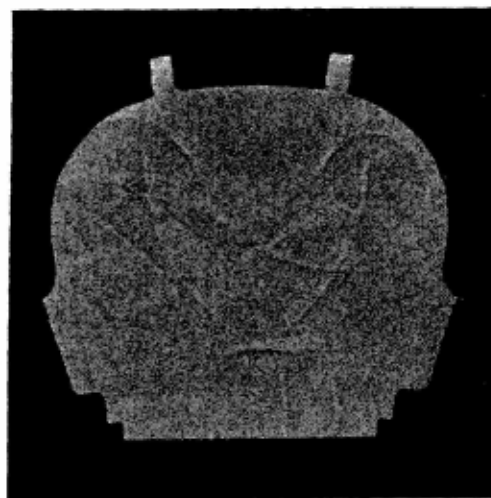


FIG. 16.



9 CONDUIT STREET, LONDON, W., 13th January 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Thirty-ninth List.

Fallen in the War

BENNETT, Lieut. JAMES, Royal Engineers [A.]. Killed in action on 28th November.

STURGEON, Captain ROBERT VICTOR [A.]. At first stated to be missing; War Office now report that they are obliged to consider that he was killed on 10th March last.

DURRANT, Captain ARTHUR MICHAEL, Royal Engineers [A.]. Killed in action.

Severely Wounded and Missing.

HONAN, Captain MATTHEW, South Lancashire Regiment [A.], of 36 Dale Street, Liverpool. Severely wounded and reported missing in the recent fighting.

Captain Honan obtained a commission in the South Lancashire Regiment in 1914 and was promoted Captain in five months. He went out to Gallipoli with the 29th Division, being attached to the Lancashire Fusiliers, and was mentioned in despatches "for great coolness, initiative and conspicuous bravery in action." He was transferred into the Regular Army in October 1915, joining the South Lancashire Regiment, and went to the Front in France early in September.

Wounded

MCLEAN, Lieut. ARTHUR JOHN, Machine Gun Corps [A.]. Severely wounded on 12th October. Progressing favourably.

Lieut. McLean was seconded from the South Lancashire Regiment to the Machine Gun Corps and was later promoted full Lieutenant. He has lost two brothers in the War: 2nd Lieut. Angus McLean, Wilts Regt., killed at Hooge, 23rd June 1915, and 2nd Lieut. Raymond McLean, Seaforth's, killed at Beaumont Hamel, 13th Nov. 1916.

Awards for Distinguished Service.

HUBBARD, Brigadier-General ARTHUR [F.] had the honour of being received by the King at Buckingham Palace on the 30th ult. and was invested by His Majesty with the insignia of Companion of the Most Distinguished Order of St. Michael and St. George.

DOUGLAS, Major J. W., Northumbrian R.E., Member of the Northern A.A.: awarded the D.S.O., and the Serbian Order of the White Eagle.

MAUCHLIN, Captain R., Member of the Northern A.A.: awarded the Military Cross.

WATERHOUSE, Captain MICHAEL, Notts Yeomanry (Sherwood Rangers), Notts and Derby Mounted Brigade: awarded the Military Cross. Captain Waterhouse is the son of Mr. Paul Waterhouse [F.], and grandson of the late Alfred Waterhouse, R.A.

WEBB, Captain MAURICE, Royal Engineers: awarded the Military Cross. Captain Webb is the son of Sir Aston Webb, K.C.V.O., C.B., R.A. [F.].

GRELLIER, Captain CECIL, Hampshire Regiment [Student], nephew of Mr. William Grellier [F.], has been awarded the Serbian Order of the White Eagle. He has also been recommended by the British Command for gallant conduct in action.

Captain Grellier, in command of a company, was left with fifty men to hold with the Dublins a hill on the borders of Serbia and Bulgaria, whilst the remainder of the battalion retired to a position in the rear. Shelled by the enemy's guns and practically without food or water for more than forty-eight hours, they held the position and joined the battalion on the 8th or 9th December without having suffered very serious losses.

Mentioned in Despatches.

CRAIK, Captain DAVID McLEOD, Royal Engineers [F.].
DURRANT, The late Captain ARTHUR MICHAEL, Royal Engineers, M.C. [A.]

Serving with the Forces.

The following is the Thirty-ninth List of Members, Licentiates, and Students R.I.B.A. serving with the Forces, the total to date being 69 Fellows, 506 Associates, 307 Licentiates, and 291 Students:—

FELLOW.

Gill, Charles Lovett: O.T.C., Artists' Rifles.

ASSOCIATES.

Hooker, W.: 2nd Lieut., R.E.
Wright, E. L.: Army Service Corps (M.T.).
Perkins, Cecil H.: 2nd Lieut., R.E.
Metcalfe, C. B.: Cheshire Regt.
Powell, J. C.: Sub-Lieut., R.N.V.R.
Welch, H. A.: R.N.A.S.

LICENTIATES.

Ardley, C.E.: R.N.A.S.
Fermaud, Edmund Auguste: Essex Regt.
Porter, Bernard A.: 2nd Lieut. (on probation), R.G.A.

STUDENTS.

McNichol, J.: 2nd Lieut., R.G.A.
Gregory, Hubert: R.F.A.
Dartnall, J. A.: R.E. Cadet Unit.
Ardley, C. E.: R.N.A.S.

Promotions, &c.

Hill, Captain D., member of the Northern A.A., has been promoted Brigade Major.
McNichol, J. [Student], to 2nd Lieut., R.G.A.
Crone, H. C. [A.], Capt. R.E.
Williams, L. E. [A.], from Artists' Rifles to 2nd Lieut., R.E.
Smithers, Lt. Alec. [A.] to Capt., R.A.
Hunter, J. Douglas [Licentiate], to 2nd Lieut., R.G.A.
Barnard, Capt. L. W. [F.], transferred to Artizan Works Co., R.E.

Informal Conferences at the Institute.

The Council have favourably considered the suggestion made by Professor Lethaby at the Opening Meet-

ing of the Session (see JOURNAL, 11th November, page 8) and have arranged for a series of informal conferences to be held at the Institute on subjects of interest to architects and of importance to the public. The conferences will be held on Wednesdays, at 3.30 p.m., at fortnightly intervals, beginning Wednesday, 24th January. The following is a list of subjects and dates as far as at present arranged, together with the names of the openers of discussions and Chairmen of Meetings:—

24th January.—“Architecture and Civilisation.” Opener, Professor W. R. Lethaby [F.]; Chairman, Mr. F. W. Troup [F.].

7th February.—“Education of the Architect.” Opener, Mr. Robert Atkinson [F.]; Chairman, Mr. Reginald Blomfield, R.A. [F.].

21st February.—“Education of the Architect” (continued). Opener, Mr. A. E. Richardson [F.]; Chairman, Mr. H. V. Lanchester [F.].

7th March.—“The Control of Street Architecture.” Opener, Sir John Burnet, R.S.A., LL.D. [F.]; Chairman, Sir Aston Webb, K.C.V.O., C.B., R.A. [F.].

21st March.—“New Materials and Methods as Influencing Design.” Opener, Mr. H. D. Searles-Wood [F.]; Chairman, Mr. E. Guy Dawber [F.].

Many well-known architects have consented to take part in the conferences and the Council hope that there will be good attendances of members.

Architects and the National Service Department.

One of the tasks to be grappled with by the new National Service Department will doubtless be the organisation of building labour. In anticipation of activities in this direction the President, Mr. Ernest Newton, A.R.A., has addressed a letter to Mr. Neville Chamberlain, Director-General of National Service, assuring him that he may count upon the assistance of the Royal Institute and its Allied Societies all over the United Kingdom. The restrictions put on private building in order to secure labour for urgent war work lose much of their value unless the labour so displaced can be transferred to where there is a shortage. The organisation of labour only is not sufficient; the organisation of those who direct labour is of equal importance. The President calls Mr. Chamberlain's attention to the fact that there are a large number of architects not available for military service competent to do work of great national importance, but their talents seem likely to be wasted for want of organisation. He urges that “they should be employed to design and carry out buildings required for war purposes, that contracts for these buildings should be widely distributed amongst contractors who are in a sufficiently large way of business to carry them out, and that as many of the smaller firms as possible should be employed as sub-contractors. “It is not claimed,” he continues, “that by following this programme employment will be found for everyone competent for the purpose, but it will certainly be the means of employing a very large number of men on work to which they are accustomed and which they can perform with immense advantage

to the State. At present this talent and business capacity are largely wasted, and unnecessary unemployment and even distress result.” The letter, in conclusion, mentions that it is proposed shortly to ask Mr. Chamberlain to receive a representative deputation on the subject. Mr. Chamberlain has replied expressing his thanks for the letter, and promising that it shall receive attention.

American Help for A.B.S. War Fund.

Through the sympathy and goodwill of a number of Boston architects headed by Mr. Ralph Adams Cram [Hon. Corr. M.], President of the Boston Society of Architects, the War Fund of the Architects' Benevolent Society has benefited to the extent of £49 7s. 4d. This sum represents half the proceeds of a theatrical performance recently given in Boston in which several architects took part. The proceeds have been divided equally between the British Fund and the Fund for French architects, and the former's share, sent by Mr. Cram to Mr. Ernest Newton, has been placed to the credit of the A.B.S. War Fund. Mr. Cram in sending the donation writes that for some curious reason architects in America are also feeling the war, though, of course, not to the same extent as in the belligerent countries. “Frankly,” he continues, “I wish we were. I mean to say I should welcome any degree of adversity if only it followed from our participation in the War. England and her Allies are fighting for us equally with the other Allied Christian nations of Europe.” Mr. Cram has on many occasions given eloquent expression to his sympathy with the cause of the Entente Allies, notably in his impassioned Address to the Victorian Club at Boston in the early days of the War.* American sympathy is very precious to us, and the generous form it has taken with the Boston architects will be highly appreciated and gratefully remembered by the profession both here and in France.

Building By-Laws.

Mr. Gordon Allen [F.] in a letter which has appeared in *The Times* and other papers this week calls attention to the increasingly urgent need for revision of existing building by-laws.

Even at the present time (Mr. Allen says) a certain amount of building is going on, and must go on, for the lamentable shortage of cottages almost everywhere has become a serious menace to the production of food and other necessary commodities. And there is not the slightest doubt that this house famine is largely due to the building regulations now in force, which have had the effect of deterring or adding needless hardships to the efforts of cottage-builders. Both the cost of building and the rate of interest are at present so high—and will probably remain so after the war—that the abolition of many of these out-of-date and inconsistent enactments has become a question of national importance. Having been founded on the “Model” series issued forty years ago by the Local Government Board, all building by-laws have long become obsolete. They take no account of modern improvements or the use of new materials (such as concrete), and it is no exaggeration to say that most of the progress made in the

* Printed in full in the JOURNAL R.I.B.A. for 23rd January, 1915.

way of economical construction has been dependent on loopholes that may be found in them. These by-laws were originally drawn up for governing building procedure in town areas; they have mischievous consequences when applying in rural districts. To keep up a high sanitary standard and to prevent flimsy construction is essential. But some of the present limitations, however imperative they may be in crowded centres, are unnecessary in the country, where buildings are often of a single story and far apart from each other. The danger of fire or infectious diseases spreading to neighbours is non-existent.

How inconsistent the "ridiculous" by-laws are can be seen in some neighbourhoods where a different set is in operation on opposite sides of the same street. Then take as an instance the question of room heights. This is an important matter where cost is the main factor (as it always is when cottages are being considered), for high rooms mean expensive high walls. Some local authorities insist on ceilings being 9 feet up, but say nothing as to the length and width of rooms, although floor space is far more essential than abnormal loftiness. Rooms 7 feet 6 inches or 8 feet high are much warmer and cosier, and can be equally well ventilated by a proper arrangement of opening windows. And a low cottage, besides being cheaper than a high one, is more in accord with surroundings of hedge-row and coppice. There are districts in which the tops of windows may be 6 feet above the floor; elsewhere this height has to be 7 feet, and sometimes 7 feet 6 inches (which once cost a client of mine an extra £100). As an actual example of the waste of money caused by differing drainage regulations I can mention two groups of munition workers' cottages I have recently been engaged on, which were built within a few miles of each other by the same contractor. The varying by-laws made a difference for the drains alone of more than £20 per dwelling.

Carpenters' Hall Lectures.

A course of ten lectures, illustrated by lantern photographs, etc., will be given on Wednesday evenings from January to April 1917, at 7.15 p.m., at Carpenters' Hall, London Wall, admission free by ticket to be obtained from Mr. J. Hutton Freeman, Clerk to the Company. The dates, subjects, and lecturers are as follows:—

- Jan. 31.—"What I have learnt from the Care of Ancient Buildings," by Mr. Thackeray Turner, F.S.A. [F.].
- Feb. 7.—"Wonder of Work in War Time," by Mr. Joseph Pennell.
- Feb. 14.—"Samuel Pepys—Secretary of the Navy—a Lover of Music" (Musical Illustrations), by Sir Frederick Bridge, C.V.O., Mus.Doc.
- Feb. 21.—"Scottish Houses of Five Centuries," by Mr. Lawrence Weaver, F.S.A. [Hon. A.].
- Feb. 28.—"An Old Kentish House," by Mr. M. H. Baillie Scott.
- Mar. 7.—"Tradition of Mural Painting," by Mr. George Clausen, R.A.
- Mar. 14.—"Some Recent Additions to the National Collections," by Mr. Charles Aitken.
- Mar. 21.—"Character in Building," by Mr. Herbert W. Wills [F.].
- Mar. 28.—"Building and Furnishing a House—The Right Way and the Wrong Way," by Mr. C. Lewis Hind.
- Apr. 4.—"British Forestry—Past and Future," by Professor Wm. Somerville, D.Sc., M.A., F.L.S.

MINUTES.

At a General Meeting (Business) held Monday, 8th January 1917, at 4 p.m.—Present, Mr. Alfred W. S. Cross, M.A. Cantab., *Past Vice-President*, in the Chair, and several Fellows (including members of the Council) and Associates—the Minutes of the Meeting held 18th December were taken as read and signed as correct.

The Chairman having announced that since the last meeting news had been received that the following members had been killed in action—viz., Lieut. James Bennett, Royal Engineers, and Captain Robert Victor Sturgeon, Associates—it was **RESOLVED**, that the deepest regrets of the Institute for their loss be entered on the Minutes, and that a message of sympathy and condolence be sent to their relatives.

The decease was also announced of Robert Henry, *Associate*, elected 1889.

The following candidates were elected by show of hands, under By-law 9:

As Fellows:—

ERRINGTON: CHARLES SEPTIMUS [*Assoc.* 1895], Newcastle-upon-Tyne.

SWASH: FRANK STANLEY [*Assoc.* 1912], Newport, Mon.

TRAVERS: WILFRID IRWIN [*Assoc.* 1906].

The Chairman announced that the Council had arranged for a series of informal conferences to take place at the Institute on subjects of interest to architects [see p. 78].

The proceedings closed and the meeting separated at 4.10 p.m.

NOTICES.

General Meeting, 5th February: Royal Gold Medal, 1917.

The Fourth General Meeting (Ordinary) of the Session 1916-17 will be held Monday, 5th February 1917, when the Chair will be taken at 4.30 p.m. precisely, for the following purposes:—

To read the Minutes of the General Meeting (Business) held Monday, 8th January 1917; formally to admit members attending for the first time since their election; to announce the names of candidates nominated for election.

To announce the name of the person the Council propose to submit to His Majesty as a fit recipient of the **ROYAL GOLD MEDAL** for 1917.

Election of Members, 5th March 1917.

In accordance with the provisions of By-law 8, the names and addresses of the following applicants for membership are published for the information of members. Notice of any objection or other communication respecting them must be sent to the Secretary R.I.B.A. for submission to the Council prior to Monday, 5th February:—

As Fellows (2).

MORRIS: PERCY [*Gates Prizeman* 1897, *Associate* 1897], County Architect (Education); 1 Blackhall Road and 2 Heavitree Park, Exeter.

WHEELER: CHRISTOPHER WILLIAM FREDERICK [*Associate* 1902], at present serving as Lieut., Army Service Corps; 7 Stone Buildings, Lincoln's Inn (office now closed); and "Melrose," St. James Road, Sutton, Surrey.

Member's Partnership Notice.

Mr. George Hubbard [F.] writes that he has taken his son, Mr. Philip Waddington Hubbard, B.A. Cantab., into partnership, together with his assistant, Mr. William Charles Symes, P.A.S.I., who has been with him for over twenty years. The style of the firm will be known in future as George Hubbard & Son; the address remains as before, 112 Fenchurch Street, E.C.

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ARCHITECTURE AND CIVILISATION.

Discussion at the first of a series of Informal Conferences held at the Royal Institute of British Architects,
24th January, 1917.

Mr. F. W. TROUP [F.] in the Chair.

THE CHAIRMAN: These Conferences, as the announcement in the *JOURNAL* tells us, are the outcome of a suggestion made by Professor Lethaby in November after the President's Address. This meeting to-day is the first of a series of five, and from the wording of the title, "Architecture and Civilisation," one might be forgiven for expecting a discourse on the invasion of Belgium by the Germans, when the last word in civilisation (German style) showed its appreciation of some of our finest monuments of architecture. I believe, however, that what Professor Lethaby really wishes to show us is that our own civilisation hardly rises to a proper and decent appreciation of architecture in our towns. I must not delay our discussion, but there is one word that I should like to say bearing upon the title of our subject to-day. A century ago we members of this Institute would have been known as *Civil* architects, the distinction being needed on account of the other branches of architecture, naval and military. During the past century engineers have absorbed both these branches of the profession, and we have naval *Engineers* and military *Engineers*. But this is by no means the end of it. Has the County Council's architect or its engineer the chief and last word in matters of street improvement in this London area? Does not the borough engineer and the city engineer lay out the alignment of almost all new streets in this country? Again, is not *Constructional Engineer* one of the names expected and usually found in most modern town buildings? How many architects do their own constructional steel? Finally, who is this recent arrival, the *Domestic Engineer*? I think we all know the kind of work he wishes to do, and the kind of worry he wants to relieve us of. He is a friend, no doubt, like all the others before him, but where is the architect left, and what remains for him to do? And last of all, is this civilisation, as it applies to us, a sub-division of labour till the architect is left to look after the remnants—Decoration, By-laws, Ancient Lights, Adjoining Owners, Ground Landlords, the co-ordination of our engineer friends, and the financial relations between

the contractor and the patient client? It almost looks as if that is what it has come, or is coming to, and that architecture may be defined as *Civil Engineerisation* made slightly! I do not think we should complain; in fact, I see no reason why we should not be grateful for this peaceful penetration of our manifold duties. But I do think we must make note of our position professionally, and do some clear thinking on its effect on our responsibilities.

PROFESSOR W. R. LETHABY [F.] read the following paper: To show that I have not been suddenly disturbed by the war, but that I was disturbed long before, I am venturing to quote a scrap from a paper I read to the Architectural Association about four years ago. "Perhaps I should first try to justify my title ('Things to be done in Architecture') by giving reasons why anything should be done, but if anybody is satisfied with our towns as they are it would be hard to move them. I see, however, that all the countries of Europe and America are racing for the lead in civilisation. Along with commercial strife there is a culture war going forward. This idea has perhaps only been consciously worked out in Germany, but it is obvious that there a consistent endeavour has been made during the last 30 or 40 years to attain to a coherent type of modern city life. All has been done with forethought and system. Everywhere there is city pride and corporate life. Every city seems to have a large piece of pure country suburb where it goes out to picnic." It is this same question of the culture war, city pride, civilisation which I want to bring before the Institute, because I think it is its special cause. I may not succeed in putting my thought and meaning into words, but I want to beg of you to consider my *meaning* so far as I can get it expressed, and not to set about tearing my words to pieces. It has become a delightful amusement to us to differ in words, and in doing so we often ignore *things*. We really all agree in very much, but we are so eager for word arguments that if our very own opinions are uttered by someone else we are tempted to contradict them, or we raise confusing other questions in philo-

sophy or politics; questions about freedom or tariff reform or education, or the leasehold system or the theory of æsthetics; but all the time we must agree that our institutions and thoughts being what they are we must, as architects, at least aim at order in our cities and towns. We cannot solve all the bordering questions, but being as we are we do as architects desire to improve the form and means of our civilisation.

We think in words, and we talk of architecture and fine designs and art and style and so on, but we do not seem to notice with our eyes how little of these things we get in the real streets of the real towns we know—London and Leeds, Manchester and Macclesfield, Birmingham and Bristol. It is the real towns as they are that I want to get people to see, really to see with their eyes, not as statistics, or as history, or as town planning on paper, as theory or style, but with their eyes, as they are: the approach, the railway station, the High Street, the food obtainable, the music, the general means of life and civilisation, the houses, the shops, the public buildings, even the lamp-posts, and the ugly blotches of the advertisement disease. If we agree in thinking that we should at least aim at bettering all these things, I want to suggest that we need a bigger centre and substance to work from than the personal one; we need a sense of citizenship, of public order, of national spirit. We need these for ourselves; and this Institute, if I may say so, needs a collective outlook and purpose. It should be more than a large group of people of one calling; it needs to become the faculty for that part of civilisation which is concerned with planning and building. The organised profession of Medicine is more than a trades union of doctors, it is the faculty for public health; Law is more than lawyers; so also I would have this Institute consider much more fully and systematically than it has done the whole question of modern building in civilisation. To repeat what I said before, "If bodies of architects could walk down the Strand and along Holborn and see what all the architectural fuss during the last sixty years has produced they might wake up to the feeling that something must be done from the public point of view. It is not a matter of the whims, the ability or the genius of the architect, it is a matter of civilisation." A public conception of architecture would, I am sure, if it could be got into our minds, be a steadying influence in design; but, more than this, the Institute should be a centre where a body of agreed opinion on city buildings could be brought together. I am clear in the distinction between city buildings and country buildings; the latter, as things are now, are much more personal, but in a city public propriety must be considered. No architect has more right to put up an insulting building than to stand on the pavement and slap people's faces. We have to struggle continually to keep things even up to their present mark. Thus the West Central squares—such pleasant places forty years ago—have been

allowed to run down and to be invaded by the most blatant vulgarity. So also our few circuses, such as those of Ludgate and Piccadilly, are disgraceful; that at the junction of Tottenham Court Road and Oxford Street is simply infamous. Our great railway stations must be the worst in the world, the new Tube stations are draughty and untidy—gashes in the street's side—and now they are running down into accepted dirt and ineptitude. All the streets are netted over across and zigzag with sagging telegraph and telephone wires hitched on to weak parapets and trigged up to tottering chimneys—a shuddering sight when you take to notice these things. Fortunately most of us give up taking notice in infancy, and we go about communing with our own thoughts on the grandeur of architecture. No one except a wondering foreigner seems ever to have seen horrible Holborn and the silly Strand. We must attain to a sense of reality and see our cities as they actually are, and we must understand that architecture is concerned with buildings in the open air, often in the fog. The other day I went along a street which was bursting with a frenzy of design, but all the fronts had the usual frowning, smoke-grimed holes for windows, when I came to one which suddenly smiled. It had extra noise-preventing casements flush with the wall, and in a raking view one saw the glitter of sky reflections. It reopened a way of doing things which in my day had been a fad of style, but I saw that it must have been invented by Wren, or one of the building masters who saw things with their eyes. That is, when it was first done it was not called "Queen Anne," but it was thought to be reasonable and pleasant.

Let me ask you to think in bigger units than we have done, think in cities and in civilisations, not in the little kinks of art-houses for stockbrokers' wives, with their garden pergolas and smoking dens all properly illustrated in the Press. Don't think of nice drawings or style-names and tall-talk, but in facts of life and building. For too long the noble art of building has been a sycophant to snobberies which do not lead to the strength of a nation. The art of building is one of the great things in the State, and the body of architects properly make the faculty which has this in charge. I may unduly magnify my calling, but I know nothing greater than the honest old craft of building.

Our public life has been shamefully let down in the appliances of civilisation. Since the coming in of the railway flood we have just scraped along as if we felt that there was no abiding city. We have, as it were, stopped a hole with rags and tied up a break with string. Think of the post offices in the back-ends of grocers' shops; the police courts of unutterable squalor; the churches with their tawdries gas-lit in June; the leaky private houses with their cracked ceilings, and fireplaces making fog rather than heat. These things are not matters of taste and the æsthetic, they are matters of national strength,

efficiency and pride. Architecture deals with civilisation, with the means of life, with towns, and we have to find a way to a richer life; we must have more of the "plant" necessary for living in cities. Even in the excellent town-planning movement I have a fear that it may harden into a subject called "town planning" rather than be an outburst of town vitality. Our towns have to be aroused; they must provide themselves with proud public buildings in well-ordered streets; they need better organised gymnastics with stadiums free of mud; they need better means of getting food, especially in the open air. It is not the climate that has prevented the existence of cafés in England—it may have been the brewing interest. We must preserve spaces of clean country near every town; we must have better national music; we must have a sense of something going on, and get out of the ring of stifling stagnation; we must set up something of the Greek idea of town worship, a sense of community interest and national spirit. A mere point of view; would that modify in any way our practice? Besides, everybody recognises the need for order, fitness, and soundness. Do they, indeed? Look at our streets as they are; look at the titles of the papers read during the last ten years at this Institute; read a year's leading articles in the architectural Press. I really think that looking on architecture as *Primarily the Art of Building Cities* might modify our practice, and if a sufficient body of people could be got to care I am sure it would. It might get into our teaching, into scholarship studies and essays, and at last it might work out into the streets. Now at once it might be seen as a reasonable basis for criticism; we should cease to be agitated about the drawings, the design, the style, but we should be solicitous about the building. Is it city-like, tidy, economical, well lighted, neighbourly, dignified, and so on? Is *this* good architecture? few of us would agree. Is *this* a good building? we should nearly all agree. We judge "designs" for ideal sites and climates in summer weather, but the architects we know don't practise in heaven, but in places like London and Sheffield, where buildings have to live through long dark autumns, winters, and springs. We have to judge in the streets on January days, and all my lifetime there has been no judgment in the streets. I would have the "art" words, like "proportion," dropped because nobody knows what they mean, and I would have buildings tested by such generally-understandable ideas as fitness, soundness, economy, efficiency, reasonableness, intelligibility, carefulness, science, mastery, seriousness, pleasantness, urbanity, vitality, boldness, humanity, adequateness, finish, discipline, frankness, directness, durability, clearness, order, homogeneity. There are two dozen words of the type which I should like to become the stock-in-trade of architectural critics; but it almost amuses me to think beforehand what good fun might be made of this in next week's papers. Sometimes I have a

fear that we may die of our sense of humour. Outsiders and amateurs are ready to understand and sympathise if we can give them anything understandable, and I am often surprised by the fresh insight of University Extension students who have not been fully broken in to buggaboo architecture. We have had warnings for the last fifty years that style designing was of vital interest to nobody, and that it was one of the elements of unreality which were putting us to sleep as a nation.—Ruskin, but he, we say, was cracked on seven lamps; Morris, but he was a little arts-and-crafts man who did not know about the might, majesty and dominion of the wonderful occult essence called "Architecture" which is laid on to each of us in a private tap; Mr. March Phillipps, but he thinks architecture should have something to do with life, which it clearly has not; Messrs. Archer, Wells, and Clutton Brock, but they are mere literary men; Messrs. Muirhead Bone and Pennell, but they are mere sketchers. Fergusson in his way was continually preaching the doctrine that architects would be "astonished to find how easy it was to do right, and how difficult to do wrong when expressing the truth only." Robert Kerr, a forgotten critic of ability, used to say practically the same thing, and so did Emmett, a still more serious writer. These all saw interest in keen life and proud work rather than in the marvellous proportions and exquisite styles of Oxford Street and the Strand. But it can't go on for ever; some day—say, five hundred years hence—architects will have to drop this high-priest business and take to commonsense, entering into the life of their time for civilisation's sake. Daily experience shows that our own hearts are sick of the vain oblations of style incense to Mumbo Jumbo, while our minds leap at the sight of a building, if haply we may find one, direct, tidy, intelligible. It rather inconsequently reminds me of a *Punch* joke, thirty years old, of a traveller in a French shop. "Have you perfume de Jockey Club?" "Yes, sir; we keep all the English smells." Walk from here to London Docks and you will see all the English styles, but few healthy buildings confident and smiling.

What would I do? I would have this Institute find a policy in public work for our towns and concentrate on this question of architecture in civilisation. Further, I would have all the local bodies follow their lead; and where there are no local bodies, the individual architects, surveyors, builders and men of good will in every town should draw together for the purpose of getting something done in their several towns. The great riddle "Triglyphs or Crockets?" might be solved by ignoring it and concentrating on structure and the things on which we are agreed. To aim at newness of "style" would be worse than to aim at oldness of style. Begin just as we are, and taking it all for granted let the leading idea of fit and reasonable building for life's sake and the city's sake gradually become the centre of our thoughts and

effort; that is what I mean by turning the corner of style anarchy: let us concentrate on our agreements.

This Institute should become a centre of effort for better town life—that is its proper business; and it should enter into relations with political economists, publicists, and politicians, and find out what they think (if anything!) about civilisation. We should try to get into touch with engineers, and lead them to be practical and scientific, and to give up their love for squalor and wriggles; to get them to be patriotic, and not so readily hire themselves out to further spoil our towns. They might be told that in Switzerland, for instance, engineering is scientific and not a fumbling jumble of muddle, like our railways with their regular system of accidents. We may beat on our own breasts, but we cannot therefore swallow so-called science whole. The science of mere dividend hunting has to give way to a science of service. Properly speaking, of course, architecture and engineering are closely related, and if we could persuade the engineers to be scientific they might, in turn, get us to be truly artistic and do our work “just so.” Thus there might be a reasonable drawing together on the common ground of the desire to build up a fine type of English civilisation. The things I have mentioned may be looked upon as preliminaries to architecture rather than the wonderful and illusive thing itself; but that does not matter, for these æsthetic altitudes cannot be brought to a clear statement, and it is desirable for us to avoid conflict on poetic, political or religious theories, and to concentrate on points where there might be hope of attaining some degree of working agreement for our job. If it is said that such commonplaces as I deal with are obvious and do not call for statement, I answer, look at the streets! How can such agreement as there is, or may be, on matters of importance to our whole national character as a keen and effective people be turned into stone and brick? that is the question. What can we do the better to bring out our true genius, which I am confident is about the best in the world?

Now, at the end I want to set down some definite propositions which sum up what I would say:

1. It is desirable to bring about some expression of agreement as to facts which would be generally admitted, and which might serve as a basis for our judgment and criticism. Agreement is necessary to development.

2. Many things which are really agreed are not made the basis of an understandable criticism: such points are fitness for function, soundness of structure, economy of means to ends, the need for light, and for easy access for repairs and cleaning, also for efficiency in chimneys, shop-fronts, skylights, windows, roof construction. We have to consider the best treatment of concrete structures, and all the questions of stone jointing and preservation, plastering, lime-washing, &c.

3. We have to consider our towns and streets as they are in fact: Edgware Road, Oxford Street, Charing Cross Road. Our disorderly railway stations must be taken for granted no longer; we must improve lamp-posts, drain-ventilators and railings; all must be made clean, smart, and decent. We must aim at the stricter control of public advertising, at smoke prevention, and at better street cleaning, and help forward all minor improvements.

4. Besides their duty to their several employers, architects must consider the city as a whole, to which each building is a contribution. A modern city should be developing types of building fit for its needs. It may be possible to find in the conception of city order and efficiency a real stimulus to building design which should do something towards lessening the disorderly anarchy of our streets. A suitable architecture, in a word, is an essential element in civilisation. Architecture properly understood is largely civilisation itself. We should seek to stimulate the interest of all architects in the towns in which they work, and we might get reports from them on those towns as centres of civilisation. It is desirable to set up advisory committees on the care and development of all our towns.

5. We must co-operate more with engineers and try to influence the powers which govern us to promulgate a policy on public art; we need a statesmanship at the Institute which shall obtain more recognition of our need of the means of civilisation, and we must recognise on our side that we are ministers of civilisation rather than purveyors of whims. This Institute should concentrate on a positive constructive policy, directing its education to the same end of the public welfare: its prize subjects, essays, scholarships might all be made to work in the same direction to the avoidance of much waste. We must aim at getting something done: it is a question of anarchy or order, of life, of survival. More and more the idea emerges that every art, science and craft must be a guild or faculty for that matter acting in the public service.

6. We should consider whether the reinstatement of some such officer as the Surveyor-General would help us forward. Up to the first quarter of the nineteenth century some sort of effort was made to get the best men to do important public works, then something happened which I have not quite made out, and the custom was broken. In 1819 the Surveyor-General was not Smirke or Pennethorne or Cockerell, but some Colonel Stephenson. In the latter half of the eighteenth century the Dances were surveyors to the City works and did buildings like Newgate and St. Luke's. We need an enquiry as to such offices. If they could be bettered in London it would react on all borough surveyorships in the country.

I want this Institute to make this question of architecture and public life its chief work until our

towns are better places to live in—that is, truly civilised.

MR. HENRY WILSON read the following remarks: The subject "Architecture and Civilisation" is a vast one. Yet the two terms need a third for logical completeness. Civilisation is incomplete without Culture—meaning, of course, agriculture. To discuss this triad is like discussing the formative principle of all things. What the relations between the three are, and may be, will perhaps best be revealed by biological parallel. Architecture is the shell of civilisation. The Mollusc makes shell, soul-body, Nations architecture, and each product reacts on, forms and limits that which produces it. The higher the organism the greater its choice. The mollusc in its progress can only add a rim to its shell, the body may increase its size and its activities, the nation change its architecture and its constitution and its ideal and its confines. Despite the great limitations of the mollusc it goes on, produces beauty till it dies; those of the human body when in health, beauty, fitness in physique, faculty and work. For the moment this nation has apparently chosen, or been impelled, to express itself by the slum, the factory, and the tin tabernacle, and to choose Humphreys as the supreme ecclesiastical architect, the author and finisher of our architectural hope. Architecture should be the skeleton, the musculature, and complexion of the nation, the product of the combined energies of agriculture, industry and religion (*V. Hugo, p. 173*). When an organism is healthy, its intake, uptake and output, its food its growth and activities are harmonised into beauty as inevitably as day follows sunrise. When its needs and forces cease to be harmoniously combined, when there is lack or excess in one or other, when one set of functions is active at the expense of the others, then comes disease. In the vegetable world you get cancer. In the animal world cancer. In the spiritual world slavery, tyranny, greed—finally, diabolism. Malignant disease is the result of rebellious cells developing in conflict with that rule by which the organism exists as an entity, or else when that rule for some reason becomes enfeebled, or when the rule itself becomes a tyranny. Not only do we see this in the world to-day, History is largely a record, a series of records, of the process.

The horrors of modern life are the result of ill-regulated or unregulated—that is, disharmonious growth. They spring from that destructive constructiveness, that discreative creation called modern industrialism, which should be regarded, not as by its votaries as production in excelsis, but production of excesses—of every kind. Architecture or building—result of harmoniously-combined energies; agriculture, industry and religion. To-day industrialism has sapped the life of agriculture, and if unchecked by religion or patriotism or right understanding of humanity will eat up England, leaving nothing but cinder-heaps, middens and factories, becoming one

slimy, slum-strewn Rotherham set with a thousand waste-vomiting chimneys; will go on till we realise that not wealth but well-being is the ideal, not individual profit but human improvement. Everywhere and always personal profit means social loss; the search for art discovers affectation; search for watertight religion brings formalism; national aggrandisement means injury to humanity. It matters not what phase of life we study, Egyptian, Greek, Roman or Mediæval, the lessons are the same. Domination spells disaster. Look at Rome! Founded by a band of marauding shepherds, led by the skilful young brigand Romulus, it ate up nation after nation, taking all, giving nothing; its policy policing, its citizenship slavery. Though Roman law evolved from priestly and patronal privilege, law outside Rome became the *ipse dixit* of consul, prætor and prefect. Empire was imposition, not absorption; surrounding nations felt this and rebelled from the very first, and though geographically one with Rome, joined themselves to Hannibal in the desperate hope of escape from the strangling grip of the mother city. They wanted freedom of life and growth. More than that, as Rome's power grew it absorbed not merely kingdoms and nations, it devoured institutions.

The municipal power, that precious formative principle which had created the city as an entity and presided over its growth—remember that the Greek city was the achievement of the municipium—that product of the federated craft guilds, that expression of the eternally true, eternally new, religion of labour, was little by little invaded, usurped, destroyed. That done, the power of Rome began rapidly to decay. They had eaten up agriculture, the crafts, all the productivities of surrounding nations, and Rome died of self-induced inanition.

Now anyone could go on for weeks on this thesis. Instead, let us consider where we are. When a man breathes he lives, as men of science tell us, not on the breath of each inspiration, but on the products of long-previous inspirations. Nations in like manner live not in the atmosphere of to-day, but on the motives and the results of anterior actions, often long anterior.

To-day we see the bloody fruit of sixty, perhaps a hundred, years of industrialism, and nations fed on that are near decay. Yet all this while our reformers, our artists, our craftsmen, our technical schools have been preparing, whatever their defects individual and collective, the bases of a new England. We may or may not see it, we hope that our children will. Those bases are, need I say it, free, co-operative production; the passion for workmanship, civic and municipal patriotism; education by and through chosen occupations, all of which, singly or in concert, will lead to a vital building as the supreme national expression. Can we not as a result of this series of conferences suggest as one beginning:

1. The abolition of town factories and their attendant slummery.

2. The extension of country workshops and garden cities, villages.

3. The extension of craft education.

4. The provision here, as in France, of workshop schools for returned soldiers, sound as well as lame, and for munition workers.

5. Some method of regulating street building, and of reform in our methods of building production.

Of course, it may be said that all this is idealism. So it is. But it should not be forgotten that the idealist is the creator of the future. To condemn him because the dream is not now tangible or in relation to what we call reality is as if we condemned the artist because he cannot make his work as ugly as his surroundings, or as if we expected him to express his dream in London mud on the dirty wood pulp of Carmelite House.

The word to-day is with the artists. Professor Lethaby said this conference suggestion was the outcome of fright. May I leave with you this thought, we must work until the nations learn that love is at once more mighty than force, and more terrible, more awful than fear.

PROFESSOR BERESFORD PITE [F.]: It is a little difficult to be actual in the midst of so much that, though true, has been put so very forcibly. I think the real thing before us—for the Institute—is that we should universally try to forget ourselves; I am afraid our Institute will find it rather difficult to do this; so that we should regard ourselves, as Professor Lethaby indicates, as being but operative factors in the building arts of the country, and look upon the subject as a whole. If we can do that, the very first thing is to forget the distinction between builders and architects which lies at the basis of this Institute. This, of course, is a counsel of perfection. If we are going to look at the world of building as it is, rather than from the point of view that we have cherished in this Institute; if we are to look upon all buildings put upon the earth as our charge and care, we shall forget that we are architects, and include in our thought builders as well, and this will be difficult for the Institute, if not indeed impossible. The really operative powers of the community are the surveyors, engineers, medical officers and inspectors of the municipal bodies. Every municipality has a Sanitary Committee, charged with looking after the very nuisances which Professor Lethaby mentioned. The whole path of this stiff-necked generation has been strewn with "sanitary improvements," with hard-fought battles over Factory Acts, Public Health Acts and Building Acts; you must be conscious that these Sanitary Improvement and Building Committees, which have legal status and have the power of collecting money and of employing officials, exist to do something, and are doing it while the profession of architects are standing outside. If these forces which exist, and which have been created by progressive thought of the last generation or two,

can be co-ordinated with architectural interest; that is to say, if that aspect of things which Professor Lethaby has so strongly insisted upon, which makes for civilisation, the difference between distraction and peace, between that which he described as an insult to the eye and that which is a pleasure—if we can co-ordinate sanitary progress with an artistic ideal, I think we shall be doing the only thing that can be done, the only thing that needs to be done; we shall be doing that which will effect what Professor Lethaby prophesies and pleads for, the re-creation of civic ideals.

My point is, that the forces exist, and it is for us as artists, who think about the aspect of things, to seek unity of action with the sanitary and the municipal work of the country, and break down the distinction which exists between the Royal Institute of British Architects and the interests of the municipal engineer and surveyor. This will go to the root of things, and I know that practically it is not possible at present. If we were the Faculty charged with building, we should no longer say to the surveyor: "You ought not to do the work"; or to the corporation: "You must employ a member of the Institute." We should take hold of the official and make him a brother, and say: "You are charged with this duty, we will show you how to do it better, and we will show you for nothing." If the existing sanitary and artistic forces are represented imperfectly by the surveyor and his brother engineer, it seems to me practical to accept that position and make the best of it, for in these officers and organisation lie the effective means of dealing with the difficulties of our towns. I might go further, and say that, as an old member of the Institute, and hoping to remain so to the end of my professional career, though this idea may be a flat contradiction to the policy of the Institute, it is not made to wreck it but to extend its influence. But we are talking in the strongest terms, and painting our picture with the most lurid colours, for the purpose of quickening our consciences to the present position, if perchance the Institute may take the lead in this matter, apart from its professional spirit, charters, and purpose of looking after jobs for its members and excluding others who are not registered, and so forth. Probably our educational policy will be the best way of doing this. The Institute has come into possession of an educational policy, through its examinations and its diplomas. Whether that educational policy can be extended largely I do not know. If a subject is propounded by the Institute, it becomes a subject of education. If the subject were civilisation, on the line of Professor Lethaby's idea of dealing with practical town life, we might educate men who, in a generation, would bring about results, and co-ordinate their action with the effective municipal authorities of the country. Nearly all the crimes which Professor Lethaby describes in our towns are laid to the charge of

municipalities: these can correct gross advertising, the smoke nuisance, and so on, and control the whole of the building operations if they choose to do so. There is plenty of proof of the possibility of this.

I do not think architects can work long without having some ideal, or else they descend into mere tradesmen. It is forty years ago last year that I entered the profession. Then we were burning with ideals. The Gothic Movement had not spent itself, it was still hot and strong. It was followed by the Queen Anne Movement in a smaller way—E. R. Robson, who died last week, was one of her early men. And then the extraordinary Arts and Crafts Movement. But to-day there is no ideal in the architectural profession that replaces the Greek ideal of the early nineteenth century, or the Classic of the mid-century, or the Gothic ideal of its third quarter; there is nothing which induces men to throw the chance of work away for the sake of achieving a design. Nor can I conceive an architect's office at the present moment turning out a set of drawings like those by Street for St. Mary's Cathedral, Edinburgh—wonderful drawings done by wonderful men. I do not think we have the men now, with all our forty years of educational progress and draughtsmanship: this has been lost. I think the architect's ideal will always come from a few students, men who are devoted to the higher studies of the profession. It is always so. Wilkins and Cockerell and the older men made that great Greek generation; and Charles Barry and men of great breadth of view in the middle of the century made another great centre of progress. These and the founders of the *Architectural Dictionary* were a set of men with ideals and enthusiasms. Finally we also had in Burges and E.W. Godwin men of the highest quality of studentship.

Have we men with ideals to compare with that condition of things? We cannot create those ideals by talking about them. But if Professor Lethaby were to set to work and build his ideas we should soon find that they would have an operative effect on the enthusiastic young men, and that is what you have to look for. If the young can be shown that the application of a pure constructive doctrine, a doctrine of fitness and beauty, produces architecture not in theory but in fact, the example will be followed, the influence will catch on, the torch will pass its light. As long as we merely sit and talk of it nothing will be done. Where there are finely typical buildings, or typical towns, or typical street planings, or typical estates, let them be pointed to, to create the enthusiasm of a new ideal. This is wanted.

I am afraid we dare not go to Buda-Pesth, or to Cologne, or to Mid-Germany and its exhibitions of town planning without having to learn moral lessons connected with their culture which would be almost impossible for us to adopt, and the drill-sergeantry which lies at the bottom of their methods would go very much against us. We shall have to get at it in the English way.

Professor Lethaby has been doing some healthy declamation. May I say with regard to the town-planning and garden-suburb movement, let us pray for the day when it may be delivered from cranks and the faddists; when one will be able to walk through a garden suburb without being afflicted with lead glazing and impossible tiling and picturesque designing; when the architecture will be straightforward. At the basis of this movement the site and road planning is the best work which has been done in England for many years; the whole system of laying out is a real advance. But let us hope that we may soon have an expression of a really modern building sentiment, instead of an affectation of picturesqueness and unnaturalness. If architects perpetuate the lead-glazing and tiling then the Kate Greenaway order of building will remain in a category of nursery wallpaper art, and never get any further. I do not think I have got anything worse to say than this.

MR. A. E. RICHARDSON [F.]: I venture to think that Professor Lethaby has intentionally sketched the canvas in crude colours to bring to our notice more vividly his personal experience of the unsatisfactory aspect of the streets to-day. We have all had an idea of the defects, but it must be understood that it is somewhat outside the scope of the Institute to cleanse the stables. It is, of course, within our power to inspect the existing machinery which Professor Pite pointed out is controlled by Borough Engineers, and departments like the County Council, the Office of Works, the Woods and Forests, and other official bodies; but unfortunately these departments are laws unto themselves, and their heads never trouble to get into touch with the Institute. In plain words, they are afraid of the Institute; the Institute is doubtful of the official attitude, and the members of the Institute are collectively afraid of each other. These conferences will bring us all together, and we shall speak with understanding from the heart. It behoves the members of this Institute to drop political questions concerning their own constitution, and to engage on greater issues. We should discuss fundamental principles bearing on social conditions; up to the present we have not recognised the perspective of social life. I do not mean in a snobbish way, but from the intellectual point of view. In turn we are not recognised by the various coteries who alone are in a position to improve matters.

Those who have been able to discuss architecture and the fine arts with politicians are appalled at the lack of insight of the majority to appreciate what architectural economy implies. It happens that one or two politicians gifted with more than average common sense, get in touch with prominent architects and load them with commissions which they are not always capable of expressing in the right direction. We must recognise that control comes from Government circles at present, and by the

time it reaches the outer ring of the profession it has weakened to extreme feebleness. Speaking of the City and the West End, it is common knowledge that new buildings are controlled by firms of solicitors and building speculators who provide the funds for erection; the result is that architects are forced by the abnormal conditions and competition to conform to the wishes of clients who are hopelessly incapable of expressing an opinion on the merits of a design. In this way many architects are compelled to accept certain rulings which are opposed to the theory of their art, and the result is a compromise. I agree with Professor Lethaby that during the past decade we have experienced not only the backwash of the worst phase of the Victorian period, but unparalleled decadence and luxury which have been reflected in terms of architecture. We are going to be very poor, and only Spartan simplicity will restore the grand traditions outlined by Professor Pite.

My own opinions centre upon one form of expression—namely, English Classic, with an open mind to the larger European tradition. I have a regard for the Romantic revival and keen admiration of the men whose genius made it, but I feel sure it is now generally accepted that modern conditions and a broad handling of Classic as a basis of style offer the best field for developments. Professor Pite has dwelt lingeringly on the works of the early nineteenth century. I, too, have followed this period, and have had the privilege of turning over some portfolios of Cockerell's containing some sketches and designs. This architect was foremost among the giants of his day, and in making a study of his sketches I have noticed the high regard for his fellows expressed in every line of the drawings, whether for palaces or lamp-posts. It is our duty as architects to get rid of luxury in our work. I do not think we can return to the policy of Lycurgus, who ruled the Lacedæmonians with such strictness, and turned the gold currency into one of iron, which made it impossible for a thief to steal £30 worth of money because it represented a roomful of iron; but we can adopt economical methods, improve the educational system in the architectural schools, and can act in an advisory capacity to reorganise existing bodies whose direct office it is to deal with the intimate amenities of the City. The policy of the Institute for the past twenty-five years has been indeterminate. This must undoubtedly be changed; the Council must get into touch with the controlling powers—namely, members of Parliament and the chiefs of Government Departments. Personally, I am entirely opposed to official architecture; it is productive of designs both costly and expressionless. Architecture will not spring up at the call of a Government Department, neither can it be summoned into being at the demand of an institute or academy. There is sufficient evidence of that in the new offices at Westminster. If any position of control is to be accorded to the Institute it should be an advisory one, not necessarily limited to a coterie of three, but

dealt with in committee. A century ago, before the days of the Institute, a group of architects called the "Committee of Taste," on which Soane, Smirke and Nash served, was deemed sufficient to deal with the growing pains of London of that time; but the individual members proved to be selfish and grasping, with the result that the Committee lost status.

The thing we have to combat is street architecture controlled by private owners acting in conjunction with incompetent architects. At present it is within the power of any financial speculator to develop sites of 20, 40 or 60 feet in the City and West End regardless of comprehensive street design. Such misguided people think only of the financial return; they have not a thought for the optical comfort of those who frequent the streets, and no regard at all for architectural cleanliness. They go on at the dictate of their own sweet wills and employ men who are not artists to interpret their greed. I know a case where the symmetry of the most important approach to London from the river is to be irretrievably ruined owing to the apathy of the City Fathers.

This pernicious method is wrong; for if the authorities are apathetic, what is the humble practitioner to do? No wonder the stuccoed conventions of eighty years ago are being turned into replicas of the ridiculous Strand.

Professor Lethaby has spoken of the principle of beginning just as we are in order to develop fit and reasonable buildings; with this view I heartily concur, but we must pay due regard to tradition, for without this nothing serious can be attempted. I must refer to what has been done by one firm of architects in America, McKim, Mead & White, who have had the good sense to pick up the threads of the old Colonial policy and to weave them with all the best motifs of the European traditions. They have evolved an academic manner, a small beginning but a sound one, which is distinctly American, and having the additional merit of being allied to the earlier period of the history of the United States without disregarding the essential needs of to-day.

Leaving the greater issues and coming down to the lesser, I have been struck with Professor Lethaby's remarks concerning stone jointing, a subject little understood by the newer school of architectural thought. It is a distinguishing characteristic of the old buildings that they were made to appear with a smooth marble surface, which gave them a superior finish. Chambers and the Adam Brothers did not have recourse to black putty jointing; they sought, like the Greeks, to eliminate the joints, which were made as fine as possible, the weather in time finding out the jointing and producing a natural texture.

Judging from the lithographs by Boys and others made fifty or sixty years ago, London was a tidier place when the Cubitts were building in Belgravia and Kensington, before the railway mania had developed to entice Londoners away to the suburbs. I cannot help feeling very strongly that the haphazard develop-

ment of the transport system during the last fifty years has helped the haphazard development of outer London.

The question is—how can we as architects put matters right? Not by indulging in Emersonian philosophy; that, as Professor Lethaby suggests, borders on twaddle. We want direct practical politics, and we can encourage a definite policy by inviting prominent men to these conferences. We do not want to talk among ourselves, but we want to ventilate our views before the men who have the ear of His Majesty's Government. In time, perhaps, we shall get a Minister with a portfolio dealing solely with the Fine Arts, and then the members of this Institute will be brought into touch with those whose duty it is to spend public funds, and so the pyramid will be complete from the apex to the base.

MR. H. V. LANCHESTER [F.]: We are having conferences on other subjects, but I think we ought to have another on this subject in order to thrash it out thoroughly and put forward some solution of the various problems brought before us to-day. We agree entirely with Professor Lethaby's aspirations. The question is—what are the best and the most logical remedies, and how can they be made effective? Mr. Wilson has suggested one, but I think there are a number of others; and I am not sure that I altogether agree with Mr. Wilson's, though I shall not challenge it at the moment. If we agree to have a further meeting on the matter, I think we might ask Professor Lethaby to summarise, and perhaps to criticise his critics, and then some of us could formulate what we think appropriate treatment for the disease. We should then be at any rate one stage nearer doing something. If my proposal meets with the approval of the company present, I will ask our secretaries to deal with it.

MR. ROBERT S. WEIR: We are only just beginning to get at things. It is not one, but a dozen meetings which are required, then we shall only be touching the fringe of the subject. It all goes back to the bed-rock: it is a matter of education. I am now on a committee that is considering craft education, and we had not met twice before we knew we were down on the bed-rock—elementary education. There is something wrong with the elementary education of the country. Everybody recognises that; the Government itself has recognised it, and a committee is considering it now. Two of our other meetings are on Education, so why not go on with the work? We have to use what influence we have to educate the people in citizenship. We must get the national spirit, and then we shall get national architecture. Every country gets the architecture which suits it for the moment. We have had the architecture of the Victorian civilisation; we want to get something better. When the men come back from the front we shall have a national spirit. Ger-

many, after it got unity and a national spirit, showed it in its architecture, such as it was. France, too, showed it in the same way. If we once get a national spirit it will be reflected in the buildings and general structural lines. I second Mr. Lanchester's proposition.

MR. WM. DUNN [F.]: I wish to associate myself with what Mr. Wilson said about Professor Lethaby's eloquent address. But I own that I am astonished to hear the general condemnation of the architecture of to-day. When I look back on my young days, and think it all over, I am not *laudator temporis acti*; the architecture we have to-day is incomparably better, and I think the standard of skill and knowledge to which architects have attained is higher than that of the men who have gone before. I think we *are* moving along the lines which Professor Lethaby would like us to move along, though not as fast as we should all like to go. If you look upon architecture as one of the evidences of civilisation, I think we have every reason to consider that evidence as highly satisfactory during the last fifty years. If you take it in regard to the English home—which, after all, is one of the chief witnesses we can have—I think it, as evolved by English architects so far as it is in their hands, is a marvellous thing: it makes towards those sweeter manners which the great Victorian poet hoped for. Tennyson took his part in doing it, because, unlike his predecessors who talked about passionate love, he showed us the beauty of our home life by making it one of his main themes. And we, given a very small amount of money and some freedom, can certainly produce the finest settings you can find in any part of the world for a happy home life; indeed, I think, by general consent, the English home is the model for all the world. As to the talk we have heard about factories, it is not so long since, in these rooms, I attended a meeting and heard one of our merchant princes, a very hard-headed man of business, telling us about rest-rooms in factories, and the need for sweetness and light, as if he had been Matthew Arnold himself. Are not our factories incomparably better than those of not a hundred years ago? Poor little workhouse brats were then kept at their daily tasks for long hours by their task-masters, who had to flog the children to keep them awake. The people who had to toil in those days had to do it in miserable dens. The factory of to-day is a very fine thing. I have not had much experience of factory building, but I have had to do with one factory at least where I have found no objection on the part of the owners to making it good, well-arranged and healthy, and as comfortable as it could possibly be. I and my partner built a factory at Chelmsford for the Marconi Company; we did not find the employers wanted to cut us down so that there should not be order, cleanliness and healthy conditions, but that there was every desire to attain these. I think every one of us who builds a house nowadays provides for sweetness and

light that you do not find in Cubitt-built houses referred to by one speaker. When we see to it that our houses are not merely domestic buildings, but really settings for happy home life, we are doing our part towards pushing civilisation along. By making the factory, the workshop and the office places where people can work under healthy conditions, we are doing a great deal for civilisation. When I was a youngster I was in the City, and I remember the conditions; to-day there is an immense improvement. I think some of us who spell art with a big A are rather led away by Art to forget the practical conditions; I always feel that if those with such great talents would think a little more of the practical side, as it is the Professor's desire, they would help us along better. It is of no use declaiming about large windows—we shall not build at all if we do not give large windows.

I was rather pleased to hear somebody speak about

"Long-haired things,
With velvet collar-rolls,
Who moo and ooo with women-folk
About their blessed souls."

I think we have gone beyond that. Architecture to-day is a fine thing, very hopeful and very promising. I have no feeling that there is a want of enthusiasm, such as Professor Pite, I think, spoke of. I believe the young men to-day are enthusiastic and anxious. It is true their enthusiasm is not directed towards the Gothic School or to the Classic School—and in my opinion it is a good thing it is not—but it is directed to many more things.

I feel at one with those who have spoken of the need of education; English education, unfortunately, is not as good as it should be, and the reason is because the people do not want to know. That is at the root of many of the defects of our system of education. In Switzerland, at a hotel table, some people were criticising public schools, when a gentleman there said: "I am a schoolmaster, and I have had letters from parents saying 'I do not want my boy crammed with book-learning; I want you to make him a good sportsman.'" But, after all, making a good record in sport will not help the country along without something more. I was never blessed with a classical education, so I do not know much about the value of classics on training; but I know this, that classics is not a suitable means of training for everybody, nor is it the only means. One end of education is to enable a man to think properly. He learns what other people have thought by reading; but he must also, in addition to acquiring that knowledge, learn to use such facts as are before him, and to think in an orderly way how, given certain premises, to see the consequences which flow from them. Mathematics is a subject which many architects hold off from, or many did, because it was not presented in such an interesting way as it might be.

Professor Lethaby, as a teacher, has an even more arduous task than ours, which is only practising. I say the methods of teaching since I was a boy are

daily being improved. The Englishman will have to turn more and more to scientific education. Also we must have more desire on the part of parents that their children shall learn. In my own part of the world, north of the Border, the wish of parents for children to learn was universal—the Scotsmen here will bear me out in that.

I have always realised how important architecture is to the world. I remember being in Beauvais, with a member of this Institute, and I could not help feeling that that building must have far more influence on the world than any picture I have seen. And when looking at St. Mark's, Venice, you cannot help feeling that as a manifestation of human intellect it was a finer thing than any of the great pictures. Is it not peculiar that the architects of famous buildings are so little known? Every little painter of the early Italian school is known, and his history traced; the architects seem to have been, like our own Shakespeare, indifferent to fame and reputation. Perhaps it is well, and for this reason—that the public do not care anything about us; they give us very little recognition. We can get on without it. It was Sir Thomas Browne who said that to be nameless in worthy deeds exceeded an infamous history. And if the Canaanitish woman lives in history without a name better than Herodias with one, then we can do without praise. The rewards which go to the successful auctioneer and warehouseman do not come to us, and we can do without them. This is the thing we were born to do, and it is the thing we take a delight in doing; it is our part in the work of the world. I would like to say again how horrified I am to find such pessimism about what we are doing and what we have done. We are going to do better still. Looking back on the whole thing, I think English architects have no reason to be ashamed of the part they have played.

Mr. Lanchester's resolution was carried unanimously, the date to be fixed later.

The second Conference was held on Wednesday, 7th February, the subject discussed being "Education of the Architect." Mr. Reginald Blomfield, R.A., presided, and the discussion was opened by Mr. Robert Atkinson (Headmaster of the Architectural Association's School), and was continued by the Chairman, Mr. H. Davies (Board of Education inspector), Mr. Alan E. Munby, Mr. A. E. Richardson, Mr. F. Roscoe (Secretary of the Teachers' Registration Council), Professor S. D. Adshead, Mr. Gerald Horsley and Mr. H. V. Lanchester. The report will appear in the March issue of the JOURNAL.

Further Conferences.

21st February.—"Education of the Architect" (continued). Opener, Mr. A. E. Richardson [F.]; Chairman, Mr. H. V. Lanchester [F.].

7th March.—"The Control of Street Architecture." Opener, Sir John Burnet, R.S.A., LL.D. [F.]; Chairman, Sir Aston Webb, K.C.V.O., C.B., R.A. [F.].

21st March.—"New Materials and Methods as Influencing Design." Opener, Mr. H. D. Searles-Wood [F.]; Chairman, Mr. E. Guy Dawber [F.].

LEAVES FROM THE LIFE OF THE LATE W. H. LYNN, R.H.A.

A SIMPLE scrap album has lately been presented to the Institute Library containing veritable scraps of illustrations and cuttings from the professional papers, photographs of executed buildings, letters and sketches all unmounted and without arrangement, and yet full of interest for architects who care to trace the career of an architect of genius as indicated in these scraps.

W. H. Lynn was probably little known personally to this generation, but he left his mark on the architecture of his time. He was the greatest Irish architect of his century, and was not only an architect of distinction but a man of character and a notable citizen of Belfast, a city which was justly proud of him and one which we are told he "seldom left except in obedience to professional duties."

The main facts of Lynn's architectural career have already been well told in this JOURNAL (25th September 1915) by his friend Mr. R. M. Young, and I need not recapitulate them here.

Lynn was one of the finest architectural draughtsmen of his day, but he used his gift mainly in so far as it helped him in his work, either in making strong pencil notes of old buildings that appealed to him, or in representing faithfully the probable effect of buildings he was designing.

Lynn was for some years a frequent attendant at the annual excursions of the Architectural Association, and he and F. C. Penrose were amongst the most indefatigable of the sketchers. Some of his drawings will be found in this album, notably the East end of St. Michael's, Coventry, a fine specimen of his uncompromising draughtsmanship. Others are the Vicar's Close, Wells; Woollas Hall and Huddington Court, Worcestershire, the two latter made during the 1881 excursion when, as President of the Architectural Association, I had the pleasure to lead through the county as enthusiastic a party of students as could be found. I have a photograph group of them before me now showing Lynn and Penrose just as boys amongst boys, and none more keen or alert than they. On the last evening of the excursion it was usual to have a little show of the drawings made during the week, when those of Lynn and Penrose were amongst the principal attractions, though there were many other fine sketchers in the party.

Lynn was also a good sketcher in water colours, but the album contains no specimen, as he probably laid less store for his purpose on this method of delineation. Penrose's sketches, on the other hand, were mainly washed drawings.

At one time Lynn entered keenly into competition work, in which he was frequently successful. The drawings were usually made by his own hand; many of them were very rough though always workmanlike, and without exception showed a grasp of the problem with one central idea governing the whole. These

were made principally in the 'sixties, in the comparatively early days of competitions, when the conditions were often carelessly drawn and the decision was in the hands of committees with little or no professional advice. The roughness and apparent incompleteness of his drawings was sometimes wrongly mistaken for careless or incomplete work, as may be seen from some, and that not the least interesting, of the correspondence to be found in this album.

One of the competitions Lynn entered into was for the new Council House at Birmingham with, I think, Mr. Alfred Waterhouse as assessor. Lynn submitted a very fine plan with a suggestion for linking up the existing Town Hall with the new buildings. The assessor reported that the drawings were too incomplete for acceptance, but advised the Corporation to purchase them for the sake of the idea they contained, and this, I believe, was done, though the fine suggestion of connecting up the two buildings was never carried out.

Correspondence in the album shows that in other competitions, such as Leicester Municipal Buildings competition, his design was greatly preferred, but was set aside for supposed non-compliance with the conditions, often the result, I think, of pressure through preparing the drawings mainly with his own hand. His correspondence in the album with the committee on these points was direct and dignified, and models, to my mind, of what such correspondence should be.

He was a great planner, and in his hands the most intricate buildings became symmetrical and dignified, easily understood by those who used them. Alfred Waterhouse, himself a great planner, once told me that there was nothing he would better like to do than to sit behind Lynn and look over his shoulder while he pinned an antiquarian sheet to his board and laid out a large plan. Perhaps one of his finest plans was that for the new Parliament House at Sydney, a Gothic design with a very fine symmetrical lay-out. This design was selected in open competition, but never executed. Another very fine conception was his third premiated design for the Glasgow Municipal Buildings, though I believe he himself preferred his Clarke Hall, Paisley, which he won in competition and carried out. He also won in competition and erected Town Halls at Chester and Barrow-in-Furness, both illustrated in the album.

The album contains a few illustrations from the many buildings he designed during his extensive private practice, which was of a singularly varied character. He designed some seventeen churches, mostly in Ireland, the Chateau at Quebec for Lord Dufferin, then Governor-General of Canada, the Campbell College, Belfast, together with many banks and other commercial buildings, and also many large houses.

Lynn, although incapable of seeking honours, appreciated them when they came to him, as is shown by his preservation of the notification of his election as Associate of the Royal Hibernian Academy, 1865,

and as Full Member, 1872; as President of the Royal Institute of Architects of Ireland, 1885, and also the award to him of a Gold Medal at the Paris Exhibition of 1867 for his drawing of the Parliament Houses and Government Offices for Sydney.

Another interesting document preserved in the album is the following account: "W. H. Lynn to the Commissioners of Public Works. To salary for attendance as Clerk of Works at Queen's College, Belfast, from August to October, 1847, nine weeks at £3 a week." The young man of twenty acting as Clerk of Works at Queen's College, Belfast, made many of the drawings for this building, including an elevation of the West front, and finally became partner with the architect of the building, Sir Charles Lanyon, to whom he had been articled.

In 1910, sixty-three years afterwards, a public competition was arranged for the enlargement of the College to meet the requirements of the new University of Belfast, and one design sent in stood out as departing altogether from the suggested arrangement, with an entirely fresh combination of the somewhat intricate group of buildings. This design was finally selected as the best, and the author proved to be W. H. Lynn, who as a young man had acted as Clerk of Works to the building, and who at 82 was still able to hold the field against all comers. It subsequently transpired that the drawings were prepared by his own hand, quite unknown to anyone, and on the assessor going over to Belfast to see the drawings Lynn left the city "to avoid the possibility of even meeting the assessor." The design was accepted and carried out to the general satisfaction, and the building was happily completed a few months before his death, which occurred in his 86th year, 12th September 1915.

It may be asked "And is this album all the record of a great architect's work?" The answer, of course, is "Certainly not." The record of an architect's work is to be found in his buildings, be they many or few, large or small. His drawings are a means to an end and not the end itself. Lynn's buildings are the record of a life which as far as I know was, apart from his work, singularly uneventful. He was never married; he was a strong man and a true artist, firm of purpose, brooking no interference with his work, shunning publicity, and sincere and modest to a degree—such was the man of whom I have ventured to pen these few unworthy lines at the particular request of a mutual friend.

I am indebted for some of the facts in these notes to Dr. Kyle Knox, and also to Mr. R. M. Young, to whom I have already referred, both pupils of Lynn.

In conclusion, I would venture to hope that before this album is consigned to its final resting place in the Institute Library time may be found to arrange and secure in the album its contents in chronological order for the information, sparse though it is, of enquirers in the future of the work and life of a great man and a great architect.

ASTON WEBB, R.A. [F.]

EDWARD ROBERT ROBSON, F.S.A. : A MEMOIR BY HIS SON.

TO condense into a brief memoir the very full and useful life of my father, who passed away at his residence, No. 2, The Paragon, Blackheath, S.E., after a short illness, on the 19th January, is no easy task. I can but give the salient angles, to adapt the surveyors' phrase, and if his pupils, assistants or friends detect *lacunæ*, I must plead a certain haste; if I may be thought, by some, to over-praise, then a son's enthusiasm is a pardonable excuse.

Born at Durham (2nd March, 1835) he was the eldest son of Alderman Robert Robson, J.P., who was three times Mayor of that city. Being an architect and builder, my father owed his extensive knowledge of the exact use of materials to his having spent three years in his father's shops (1851-3). This step he took deliberately, apart from its being a condition imposed by Mr. Robson senior, who wished his son to enter Durham University. But, having passed his youth in sight of the unrivalled Cathedral at Durham, the central tower of which one day he was destined to restore, the grandeur of this building created in my father a passion for Architecture.

After three years spent as a workman, he was articled, for another three, to John Dobson of Newcastle-on-Tyne, then the best-known practitioner in the north of England. Here he met his future partner, J. W. Wilson Walton (later changed to Walton-Wilson [F.]), William Bell Scott, John Johnson and others.

The power to carve a definite career was shown next by my father's aspiration to be under Mr. Scott, in London. Accordingly, in 1857, he went to the famous ecclesiastical architect as an improver, and he remained there for three years working with enthusiasm early and late. He taught the late G. G. Scott ("G. G. junior" as he was called) to trace, and I have letters from him to my father of an interesting and intimate character. The comparatively small output of this great architect—incomparably the finest of the deceased Scotts—(incidentally, I may say) the discerning deplore.

The year 1858 was spent in extensive Continental travel, and the sketch-books before me are definite evidence of sound taste and accurate work as well as an artistic touch. He, therefore, spent ten years before starting to practise and taking his fellow pupil, the late J. W. Walton-Wilson, into partnership. Chambers were taken in Adam Street, Adelphi, but, as both partners had strong connections in the north, a branch office was opened in Durham, and my father was appointed, as an immediate outcome, to the important post of Architect to the Cathedral by Dean Waddington. This position he retained for six years, during which time he restored the Galilee, the Chapel of the Nine Altars and the Central Tower. Incidentally he prevented his late master, Sir G. G. Scott, from adding a spire to this tower, for which, absolutely right obstruction, Scott never quite forgave him.

At this time, in conjunction with Canon Greenwell, he founded the Architectural and Archaeological Society of Durham and Northumberland; the Canon is still President, and many important volumes of *Transactions* have been issued. Not long after, my father was elected a Fellow of the Society of Antiquaries. His marriage, when at Durham, to the eldest daughter of the late Henry Longden, the eldest of a family which was famous as ironfounders in Sheffield, proved a most happy one. A woman of great tact, charm and dignity, she became an ideal helpmeet to the impetuous architect.

In 1864 the family of four (increased in 1871 to five) moved to 17, Faulkner Square, Liverpool, on my father being appointed Architect and Surveyor to the Corporation of that city. His application was well backed by the Royal Academicians, Smirke, Street and Scott; by Ewan Christian, William Burges, Sir J. Mowbray and others. Here, for seven years, he had charge of the public buildings (including St. George's Hall) and the very valuable landed estates vested in the Corporation. He also built St. Anne's Church and the Municipal Offices. When free from professional work he acted as Captain in the First Lancs Engineer Volunteers, and during the riots he was a special constable.

On his doctor's advice, as the climate of Liverpool had never suited him, he determined once again to make his *locale* London, where he lived until the present year.

In 1870, on the passing of the Forster Education Act, my father determined, if he could, to lead the way with regard to Educational Buildings. And a deciding factor, beyond his doctor's advice to leave Liverpool, was that he was barred from private practice—a restriction to which he determined never again to submit, and to which he never did submit. To this end, in May, 1871, he was to be found installed as the first Architect to the London School Board. The family then came to live at Blackheath, first in St. German's Place, and two years later, in The Paragon; a delightful segment of early Georgian houses, of which some illustrations appeared last year in *The Architects' and Builders' Journal*. In 1872 he became a Fellow of the Surveyors' Institution.

During the next two or three years, in spite of heavy strain, he managed to find time to travel to America, Switzerland, Germany, Austria, France, Belgium and Holland in search of the best schools, and in 1874 he published his well-known work on them,* as a kind of guide to the School Board as to their work in relation to architecture, as well as to architects, who were then building schools totally unsuited to their purpose.

After building some hundreds of schools for the Board and setting his mark definitely on the archi-

tectural appearance of London, on the death of Major Rhode Hawkins the appointment of Consulting Architect to the Education Department fell vacant, and the Liberal Government then in power offered it to my father. He accepted rather as a call of duty (as he knew that he had placed the planning of schools in London on a permanent basis, which anyone with a sense of planning and of clothing a plan, could continue) although he sacrificed some hundreds a year of certain income by so doing. The appointment carried with it two others, that to the Scottish Education Office and that to the Home Office. On leaving the School Board he was presented with an address enshrined in a beautiful silver Greek temple by his old staff.

Loyally as ever, he gave his first consideration to the public service, and of the exceptional claims made by these new appointments I had ample means of judging when I assisted him in Whitehall. Frequently over one hundred sets of plans, for entirely different sites, had to be reported on before he felt free to attend to his private work. But his extraordinarily rapid grasp of the essentials of each new problem held him in good stead and astonished me. Whilst most men would have been dealing with a number of ten he would have reported on fifty, clearly, concisely and soundly.

When a new Education Act created the Board of Education my father was retired suddenly on the grounds that "new measures need new men." At any rate, that was the gist of the answer given in the House of Commons on the subject. My father was less disturbed at the step taken than at the callous way in which it was done, without proper recognition of his faithful twenty years' service to the State. The fact was that he was too strong, fearless and honest a man for the new *régime*. As an index to this inflexible side to his character I will give but one telling instance: A minute paper of an important character had been reported on by my father in the usual way; it then went the round of nearly all the examiners in the Education Office, who reported unanimously that for the proposed action, which would have arisen out of my father's minute, there was no precedent. The chief examiner then sent the minute back to him with a special minute to that effect. Mr. Robson's final minute read: "Bad precedents should not be followed.—E.R.R." The red-tape of a Government Department could not stir him from a right course; *fortiter in re*, no doubt, but *suaviter in modo* conspicuously absent.

Strictly he was not entitled to a pension, as he retained his private practice and was therefore not a civil servant. But considering the great importance of the work he had inaugurated—which had more than trebled since he was first appointed—a graceful act would have been the offer of a pension, which, however, I doubt if he would have accepted. The only honour which my father ever received for his invaluable services in the right ordering of schools

* *School Architecture: being Practical Remarks on the Planning, Designing, Building and Furnishing of School Houses*. With over 300 illustrations. 440 pp. London: John Murray 1874. (2nd ed.: 1878.)

was the Freedom of the City of London. He was a member of the Skinners' Company. From this time, 1903, he devoted himself solely to private commissions.

Amongst other matters he was entrusted by the late Lord Rothschild with the re-building of the Jews' Free School, Spitalfields, the largest elementary school in the world (for 3,500 children—having no less than four halls and 76 classrooms). The only stipulation was that education should not stop for a single day. By means of day-and-night shifts and other contrivances the builder (Mr. Carmichael) and my father managed to perform this unusual feat.

Most of the large technical, and many hundreds of smaller, schools in this country have been built on Mr. Robson's advice since he wrote his standard book on schools. He knew that certain particulars were out of date, but the book is still indispensable in many ways. It was only when he told me that he would not trouble to re-issue it that I asked him to accept the dedication of my little work on the same subject. This he did willingly, and at the same time offered to suggest revisions for a further edition.

The style with which he endowed the London schools was, to all intents, a new one. It was based on a careful study of old brick buildings in London, Holland and Belgium, and it is unfortunate that indiscriminating plagiarists have travestied it in almost every town in the land. Also many of his best schools have been murdered artistically by later and undiscerning hands.

My father was assessor in many important competitions, and we travelled together often to distant places on these errands. *Festina Lente* was his motto on such work, and his careful weighing of the various points was an ideal lesson. As there is a good list of these competitions in *The Builder* of February 2, I will not give another. He was also much in request for arbitrations, ancient lights cases, and as a witness in the Law Courts.

Having traced in outline his busy public life, a few words must be written about his private work. The first client of importance was the late Right Hon. Sir John Mowbray, Bart., for whom he built a large block of almshouses at Sunderland. His client expressed himself delighted at the thorough way in which the work was done, and at the fact that there were no "extras." His largest work, the People's Palace, Mile End Road, with the schools, library, Queen's Hall, swimming-baths and clock tower, was commissioned by the late Sir E. Hay Currie, who had received a considerable grant from the Drapers' Company for this purpose. The style is Neo-Greek, and the hall is a model for builders who care to study the intricate science of acoustics.

The original design was more ambitious, with correspondingly less unity, than that executed. The octagonal library is an artistic piece of construction with classic groining embracing three bays. The embryo of this idea is to be found in the mediæval roof of the kitchen of the Bishop's Palace in Durham.

(Those classic men who are wont to sneer at all things Gothic might note.)

Queen Victoria, on opening the hall to which she had given her express sanction for the use of the name *The Queen's Hall*, was emphatic in her praise. At this time my father was offered the honour of knighthood (an honour which had been previously offered by the late King Edward, when Prince of Wales, at the opening by him of the Prince's Hall, Piccadilly), but his answer, "Plain Mr. Robson is good enough for me," although characteristic of the man, was not exactly complimentary to the art of Architecture.

The year 1883, to pass back two years, is the date of possibly his best work, the Institute of Painters in Water Colours, Piccadilly—a work which has had a more marked influence on certain aspects of design than any other of recent date. The germ of this *motif*, with its narrow end-bays and long plain frieze, was the back elevation of Drury Lane Theatre, but the principles involved were taken from Ruskin's *Seven Lamps of Architecture*. My father marked the passage in my copy of the first edition, and, as these laws are immutable but largely unobserved to-day, I quote from p. 115, par. xxvi, from the Fourth Lamp—"Beauty":—"Wherever Proportion exists at all, one member of the composition must be either larger than, or in some way supreme over, the rest. There is no proportion between equal things. They can have symmetry only, and symmetry without proportion is not composition. It is necessary to perfect beauty, but it is the least necessary of its elements, nor of course is there any difficulty in obtaining it. Any succession of equal things is agreeable; but to compose is to arrange unequal things, and the first thing to be done in beginning a composition is to determine which is to be the principal thing. I believe that all that has been written and taught about proportion, put together, is not to the architect worth the single rule, well enforced, 'Have one large thing and several smaller things, or one principal thing and several inferior things, and bind them well together.'"

One day my father met Mr. Ruskin, who was an old friend, in Piccadilly standing opposite the Institute, and he said that he "never passed without stopping to admire its freshness." Great was his delight when my father quoted to him the gist of this passage and thanked him for his inspiration.

The mention of Mr. Ruskin recalls an anecdote of him of a professional character. When he came to my father first with a request to design for him a museum near Sheffield, the "master," as he was called, waxed enthusiastic and said that he wanted "a roof like ice, scintillating like diamonds," and much more of a rhapsodic nature. When he had finished, Mr. Robson said: "Yes, Mr. Ruskin, but how am I to keep the water out?" "That," was the reply, "is your affair." Financial considerations prevented this project from maturing, however, although the design was made, and Ruskin was greatly delighted with it.

When travelling in Italy my father wrote to Ruskin

from Florence, concerning the Sheffield Museum, and from a bundle of his letters I extract the following characteristic reply:—

Lucca, 2nd Oct.. '82.

DEAR ROBSON,—

... I'm glad of your note with tracings, as it implies you're better—but how could you think I would be bothered about Sheffield when I was in Italy! I came here to direct you in the study of the duomo of Lucca—not to make catalogues for Sheffield. . . . Please take care of yourself in the first place and let Sheffield take care of itself and me take care of myself, if I can.

Ever affectionately yours,

J. RUSKIN.

In a letter a month previous, Ruskin had warned him "not to be too much aghast at the comic inlays—I am not going to imitate them, but *study the relief sculpture* of the central gate of the duomo—till I come." This particular example of Italian art did not appeal to my father, but I have heard him say that he considered the library of Sansovino in Venice as not only one of the finest things in Italy, but probably of the world. On exhibiting the perspective drawing of the Institute in Paris he was awarded a gold medal.

The New Gallery, Regent Street, W., remains to be mentioned. This was built for the late Mr. Comyns Carr and Mr. C. E. Hallé, who came to him from that distinguished architect the late Philip Webb, who had said "there is only one man in London who can do this for you well in the time—Robson of Westminster; go to him." That was because the promoters wanted the existing market turned into a picture gallery in six weeks! My father had returned but a few days previously from Constantinople, fired with the wonderful Sancta Sophia and the right use of marble. He cased the C. I. columns of the old market with marble and otherwise utilised the existing structure, effecting such a transformation that it became the most charming gallery in London, with its central marble hall and fountain, and with but few steps. It is a satire on the present state of Commerce *v.* Art in this country that, a year or two since, it became a restaurant, and it is today a mere roof under which "movies" are shown. The beautiful Neo-Greek entrance has been ruthlessly torn from its surroundings and is I know not where! I have not space to deal with his large provincial works, as the Ladies' College at Cheltenham for the late Miss Beale, but I would conclude this notice with a few more intimate remarks revealing the influences of others on his designs.

His early work, especially ecclesiastical, was tempered strongly by French Gothic, notably after he had travelled in France with Johnson of Newcastle. Some of the plates in the latter's *Early French Architecture* were from my father's hand. He also contributed to the *Liverpool Sketch Book*, and I believe to the *Spring Gardens Sketch Book*.

After passing through the "brick period" of the School Board, a close study of work at Athens and that of "Greek" Thomson modified his views, but he never fell into the vulgar error of slighting Gothic. Good work in any style he admired unreservedly.

Of the many famous people he met, and in many

instances knew well, I could give interesting reminiscences; but this is not the place. Dante Gabriel Rossetti, however, designed for him a beautiful gold watch, in enamel, representing the sun, moon and stars on the face and an exquisite peacock—an old emblem of the Resurrection—on the reverse, symbolic of time on the wing. This I am proud to possess. Philip Webb designed furniture for him; Morris and Burne-Jones glass. To Onslow Ford he gave his first commission. And many architects, to my knowledge, owe him much for assistance gratuitously given when in difficulties on school plans.

The pungent wit which characterised my father's conversation gave him the *entrée* into many places where good company is valued, for this natural gift of wit was of the intellectual order and spontaneous. At Durham once, when he was piloting a specially-invited party of friends round the cathedral, of which he knew almost every stone, an American who had attached himself uninvited to the party and kept interpolating remarks (with his hat on) incensed Mr. Robson to such an extent that he managed to whisk off with his umbrella the intruder's top-hat on to the floor of the nave. Picking it up carefully, he bowed, and said, "I beg your pardon—was it on your head?"

Of the partnerships into which my father entered I am not fully cognisant. After the late Mr. Walton-Wilson, the late J. J. Stevenson joined him during the rush of work at the School Board. But he told me once that "he was occupied often in the afternoons rubbing out what John had done in the morning." The late Mr. Bodley had previously suggested a partnership, but for various reasons this did not mature. For some time he worked with the late John Whichcord, a past President of the R.I.B.A. There was no actual partnership, although he bought his practice. In 1910 he took into partnership Mr. J. J. Gott, a nephew of the late Bishop of Truro and who had been trained under Mr. Caröe. This connection was severed only by Mr. Gott having to join the Army.

Of hobbies my father was innocent, unless the formation of a fine collection of pictures may be said to fall under that category. Examples by Crome, Constable, Corot, Michel, Israëls, De Wint, Cuyp, Mierevelt, Fulleylove, Dodgson, Boyce, Hardy, Cox, Munthe, Linton, Orrock, and many others, are sufficient evidence of a catholic taste. No doubt this was fostered by a long and intimate connection with the great connoisseur, James Orrock, from whose collection many of the pictures came.

Music he delighted in, and, having a good tenor voice, he joined frequently in glees, but any good music appealed to him except the very modern. In sport he was a moderate performer as a golfer, skater and billiard-player. We had so much in common—our relations being always of the friendliest—that my loss is difficult to estimate, but I have endeavoured to give, faithfully, some insight into the life of a great architect, of a man of sterling integrity, of a friend of lasting worth.

It was not until some five years ago, when he met with an accident in a taxi-cab, that he began to feel himself other than "as fresh as ever." But he had one enemy, bronchitis, which, having gradually weakened him, caused his peaceful passing as I have said. He lies beside his wife on Shooters Hill, beneath a beautiful granite cross of his own fashioning. I know that he will take a good report, dauntless, to his Officer Commanding. R.I.P.

The official representatives at the funeral on the 24th January were Mr. E. Guy Dawber (Hon. Sec., R.I.B.A.), Mr. H. J. Leaning, F.S.I., and Mr. W. Hatherley, R.I., and exceptionally inclement weather kept many others away.

PHILIP A. ROBSON [F.].

LIST OF WORKS.

As Mr. Robson's plans are, owing to the war, in store, I am unable to give a complete list, but I believe that nothing of great importance is omitted in the following. Competitions he always regarded as a kind of higher pastime, but I consider that, of all the plans illustrated, his for the County Hall was the best. This was made in conjunction with the late Mr. C. E. Mallows [F.].

Large block of Almshouses, Sunderland, for the Rt. Hon. Sir J. R. Mowbray, Bart., M.P.

All Saints' Church, Rainton, near Durham.

St. Cuthbert's Church, Durham.

Enlargement of Upleatham Hall for the Rt. Hon. the Earl of Zetland.

Restorations of the Great Central Tower of Durham Cathedral, the Chapel of the Nine Altars, and the Galilee.

St. Anne's Church, Liverpool, for the Corporation of Liverpool.

Municipal Offices, Liverpool, for the Corporation of Liverpool.

Shotley Hall, Northumberland, for Thomas Wilson, Esq.

The People's Palace for East London, with Library, Queen's Hall, Clock Tower, and Swimming Bath (now known as The East London College).

Institute of Painters in Water Colours, Piccadilly, and the Prince's Hall.

Nun Monkton Hall, near York, for G. Crawhall, Esq.

The New Gallery, Regent Street, London, for Messrs. Hallé and Comyns Carr.

The Great Hall of the Ladies' College, Cheltenham.

St. Hilda's Training College, Cheltenham.

Loftus Town Hall, Yorkshire.

High School for Girls, Truro.

Schools at Chester for His Grace the Duke of Westminster.

Guntton Hall, Norfolk, for the Rt. Hon. Lord Suffield, K.C.B.

Dunstable Grammar School and masters' houses.

All Saints' Church, Luton, Kent, and the Vicarage.

Wilson's Grammar School, Camberwell.

Mansion, Trosley Towers, Kent, for Sir Sydney Waterlow, Bart.

The White Hart Hotel, Windsor.

London Schools (some hundreds).

Sedburgh Vicarage, Yorkshire.

Monument to the late John Whichcord, P.R.I.B.A.

Monument to the late Prince Imperial, Chislehurst Common.

Monument to Mrs. Robson.

Monument for Sir B. Baker.

The Hall, Hampstead, for the Misses Allen-Olney.

Enlargements and Restorations of many Parish Churches.

School Board Offices, Sheffield, the Great Central School, and Firth College.

Board Offices (part) for the School Board for London.

Board Offices for the Sheffield School Board (joint architect).

Board Offices for the Driffield School Board (joint architect).

High School for Girls, Blackheath.

Large School for Girls, Baltimore, U.S.A.

Stained Glass in the Queen's Chapel, Osborne.

Stained Glass at Friedrichshof for the Empress Frederick.

House, Bow, Durham, for W. H. Bramwell, Esq.

House, near Haslemere, for T. Humphry Ward, Esq.

Enlargement of Queen's Tower, Sheffield, for Samuel Roberts, Esq., M.P.

Jews' Free School, Spitalfields.

Firth College, Sheffield (joint architect).

Bow School, Durham.

St. James's Club, Piccadilly (remodelling).

Blackheath and Charlton Cottage Hospital (extensions).

Truro House, Blackheath.

Chapel, St. Christopher's School, Blackheath.

Blackheath School (laboratory).

House, Westcombe Park.

Bailiff's house, Amersham.

House at Flitwick.

Houses, Wandsworth Common.

Holmstead Place, Sussex (additions).

27, Leadenhall Street, E.C.

Queen Anne's Mansions (2nd half), S.W.

Park Hill House, Streatham.

Sutton Rectory.

House at Duppes Hill, Croydon.

House at Sheffield.

House at Durham.

Mr. WM. RUSHWORTH [F.], Architect to the Education Committee, Durham, writes:

It was with the deepest regret that I heard of the death of my late chief, Mr. E. R. Robson, F.S.A. [F.], with whom I had the good fortune to be closely associated for many years as pupil and chief assistant, thereby gaining a knowledge of architecture from one who was an ardent upholder of art as applied to building, a kindly critic, and a facile writer on architectural subjects.

The Board Schools of London and many important buildings in London and the provinces are a fitting monument of his ability and energy, but he will be remembered by those who knew him best for his great generosity and large-hearted kindness.

Robson was a man who never spared himself, particularly when engaged in reporting on competitive plans: these would be carefully investigated again and again, the points for and against each competitor noted and tabulated, with the result that in all cases, it may be safely said, the best design was placed first and the next in merit second and third respectively; while the lucid, incisively-written reports seldom failed to carry conviction to the minds of the promoters of the competitions.

W. RUSHWORTH [F.]

THE LATE HERBERT BATSFORD.

THE death of Herbert Batsford on the 14th January after a long illness removes a striking personality from the publishing stage. His was a career of extraordinary moment to the architectural profession, for his characteristics were unique in resembling those associated with the eighteenth-century publishers, who combined the functions of editor and patron and encouraged architects to record their own impressions of the meaning of architecture.

It is no light task to pen one's thoughts of a friend whose knowledge and enthusiasm inspired respect from all he came into touch with. It will, however, be fitting homage to his memory to show him as the lineal and apostolic descendant of that remarkable group of men who published a century and a half ago from positions in High Holborn within a hundred yards of the same spot.

The early accounts of architectural book-making are closely allied to the history of the matured tradition in this country, for the confraternity of Barrabas became a distinct craft in the early years of the eighteenth century, and sufficient emphasis has not been given to the acuteness and enterprise of those men who, depending on the support of wealthy patrons and burdened with the expenses of engraving, issued the great folio volumes which are eagerly consulted to-day. In the first place, it was customary for authors to combine with printers of repute to issue books on architecture, and a variety of names can be traced relating to those who flourished from 1670 to 1730. Their imprints mostly bear curious references to the signs that distinguished their places of business, such as "The Bible and Ball in Ave Maria Lane, 1673," or "The Stole and Anchor on the pavement in St. Martin's Lane, 1729." Later in the century the name of the printseller, Robert Sayer, who flourished "at the Golden Buck in Fleet Street," becomes prominent as the vendor of architectural books and prints, both English and foreign. The name of Robert Pricke, famous as an engraver and translator from the French, is well known. This can be verified by his imprint of 1673 on Le Muet's "Art of Fair Building," "Printed for Robert Pricke in Whitecross Street over against the Cross Keys, and at the Golden Lion, at the corner of New Cheapside next Bethlehem, where likewise you may have choice of other books of architecture, also maps, copy tints, Italian, French, and other prints." Many architects of the period, among whom was Vanbrugh, preferred to deal with Tonson at Amsterdam.

In the second half of the eighteenth century the imprint of Joseph Taylor appears, at first in the form, "Sold by J. Taylor at the Bible and Crown in Holborn, near Chancery Lane, 1776," then nearly opposite Great Turnstile, and later at the Architectural Library, No. 39 High Holborn. In those days folio volumes of architectural drawings were

published by subscription, and every person of distinction, from the nobility to carpenters, deemed it a privilege to have their names printed on the opening pages.

Taylor produced many important works, including Soane's early books and Hepplewhite's furniture designs. It is of interest in these days to contemplate the variety of the subjects dealt with in Taylor's catalogue, and to note the comparative cheapness of the books, which enabled even the small builder to form a working library and thus improve his taste and knowledge of detail.

The firm of Taylor continued its activities until 1825, when it was supplanted by Priestly & Weale, who heralded their appearance with a small edition of Stuart & Revett's "Antiquities of Athens"; another pocket edition was published in 1841 by Tilt & Bogue in Fleet Street and John Crossley of Leicester and Rugby. Although Taylor's business was to some extent overshadowed by new firms, his nephew removed from Holborn to 6 Barnard's Inn, and continued to interest himself in this particular branch of publishing, for he was responsible for the issue of Papworth's version of "Chambers' Civil Architecture," which was the chief book of reference in the 'forties.

Glancing at Priestly & Weale's catalogue of 1825 we find it to contain 200 pages and to give a list of 1,500 items. They were now in the first flight of publishers. Later on John Weale established himself at Taylor's old address, and turned his attention to meet the growing demands of the engineering profession as well as an occasional venture in architecture, including the magnificent volume by Professor C. R. Cockerell which appeared in 1860. Mention must also be made of Ackermann, who supplied the wants of the Regency Period.

At the time when Weale was the recognised arbiter for things in the architectural publishing way the name of Batsford first appears.

Bradley Thomas Batsford, the founder of the present firm, was apprenticed to a Mr. Dickens in 1837; his indentures to "the art and mystery of book-selling" are preserved among the archives of the firm.

At this period the discount controversy in which Charles Dickens took a part occupied the attention of the literary world, and young Batsford's employer was one who favoured the innovation, and in consequence was boycotted by other booksellers and publishers. The time soon came when Bradley Batsford, then a young man of 21, opened a small business in High Street, Holborn, moving a few years later to within a few feet of Taylor's site, No. 52 High Holborn. This business at first dealt with medical and general books, and an early catalogue of 1853 speaks of "Bradley Batsford's essay bookshop, three doors west of Brownlow Street." The death of John Weale in 1862, and the disposal of his stock three years later, further prepared the way for the

rise of the house of Batsford, and led to books dealing with architectural and engineering works becoming permanently and finally the subjects of the firm's interests. By this time the eldest son had entered the business, and the first ventures of the firm were made during the 'seventies, and for an unbroken period of over forty years the name of Batsford has been the distinguishing feature of nearly every book of importance since published. On the death of the second son in 1882, Herbert Batsford, who had been studying for the Bar, was asked by his father to take up a minor position in the firm, and for twenty-two years father and sons were associated. Herbert Batsford appeared on the scene at the time when the Gothic school had reached its zenith; then followed a barren period of architectural book production in marked contrast to the activity of the French and the Germans. It was an inferior book sent to Sir Gilbert's Scott's office that led to the formation of the Committee that resolved to issue privately the pioneer series of architectural records known as the "Spring Gardens Sketch Book."

There is an interesting article in *The Builder* for 1885 on books recommended by the Institute to be studied by students which contrasts the poverty of the books of that time with the profusion that now gives a student a wide range. From 1891 to the present day the firm of Batsford has been associated with the majority of the modern works in architecture, ranging from Mr. Gotch's folios, Messrs. Belcher & Macartney's later Renaissance examples, Mr. Stratton's Tudor architecture, and Mr. Ward's treatise on the Renaissance in France. It is noteworthy that the whole series of volumes on architecture produced in England are the result of private enterprise, and this is in marked contrast to the excellent system that pertains in France, where the Ministry of Fine Art has lent its support to recording the national monuments. Herbert Batsford soon realised that new methods were required if architects and the general public were to benefit from the study of books, and his immediate activities date from twenty years ago, and this policy was continued more vigorously after the father's death. There can be no denying the fact that Herbert Batsford was an enthusiast, not, however, of the dangerous type who rush headlong after the latest fashion, but a genius who carefully weighed the possibilities of a book, and looked upon it primarily from the point of view of the requirements of the practising architect. He knew his audience, and encouraged those who came to him with immature ideas to spare no pains to produce the best results obtainable. His knowledge of books was remarkable; he seldom had recourse to catalogues or library lists; what he did not at first fully understand he made his business to master, and astonished the majority of his friends with his vast knowledge of the atmosphere of the past. He had a passion amounting almost to an obsession for the works of the eighteenth century, and rare taste and

discrimination as well as a minute knowledge of the prints, mezzotints, and engravings produced during the past three hundred years. His study of ornament and craftsmanship was founded on keen artistic perception, with admiration amounting to reverence for the works of real artists. The contents of every library and museum of importance in the country were known to him, and his vivacious figure was frequently to be seen in the print room at the British Museum as well as at Kensington. In his researches he discovered the existence of an early state of "Piranesi's imaginative Carceri." As a student of London, Herbert Batsford had few equals; all the aspects of London life in the past made an especial appeal to his receptive and sensitive temperament: he studied with care all that could be learned from bygone customs, and as his knowledge widened he responded more keenly to the teachings of history. In addition to his study of the Metropolis, nearly every place of importance in the kingdom was visited, as well as the majority of the cities on the Continent. Those who accompanied him on his travels know the almost boyish enthusiasm he expressed for fine work of every description. Herbert Batsford had no sympathy with small policies: he demanded books from his authors of large scale, apart from size. His delight was in books—fine books, rare books, new books—and yet again books, a factor which prompted him to publish the "Fellowship Series," edited by Mrs. Arthur Stratton. In the advancement of taste he played a very noble part, and if at times his attitude was didactic he more than atoned for it by the confidence he inspired among those who had the good fortune to be under his direction. Herbert Batsford was more than an ordinary publisher, he was primarily a patron of the arts, and did more than most men to strengthen the position of architects with the public. It required courage to finance ventures without a Government subsidy, but it was rare for him to make a mistake, and the series of volumes bearing the name of the firm carry the impress of taste and distinction for the inspiration of posterity.

I have avoided going into personal details of Mr. Batsford's character, of which I have a fund of pleasant anecdotes; on the contrary, I feel that the only suitable mark of appreciation to his memory is to record the history of the house in a way he would have liked.

A. E. RICHARDSON [F.].

MR. RAFFLES DAVISON [*Hon. A.*] writes:

When a vivid personality is suddenly withdrawn from our midst our thoughts are instinctively turned backwards, seeking for a mental summary of the life that is gone, and so subtle and varied are the influences at work about us that it is not always easy to find at once a clear and satisfactory record. But the death of Herbert Batsford we can say at once and

without any question means a loss to the architectural profession—a loss of great service which he would yet have rendered to the difficult and arduous task of publishing the best form of architectural literature known to our time. The old and reputable house of Batsford would never have taken such a high and distinguished place in the book world had it not been for the developments which followed the pioneer work of the founder of the firm and his elder sons, Mr. Bradley and Mr. Henry. Herbert Batsford was certainly fortunate in his collaborators—his various employees and co-directors—and especially in the association with his nephew, Mr. Harry Batsford, whose ability in regard to literary matters and book-publishing has been remarkable, even in the company of such a strong and energetic personality as Mr. Herbert. This is in itself a happy augury for the future of the firm. Only those behind the scenes can know how great a part the capable publisher plays in the issue of such a series of books as those which bear the name of Batsford. When the author hands in his manuscript it is assumed by many that the rest of the business is quite easy and perfunctory, but in a large number of publications the real trouble seems to begin when the publisher commences his part of the work. Messrs. Batsford's point of view has always contained a high ideal, and the best that could be done within the limits of size and cost has always been aimed at. For this maintenance of a high standard, and indeed very largely for its creation, Mr. Herbert was responsible, and the architectural profession owes him a great debt of thanks for the quality—may one not say the dignity?—with which he has endowed his long series of publications. After all, this is a point which affects us very closely, and we cannot be indifferent to the fact that our profession has had such a finely produced bibliography. In acknowledgment of what he has been and what he has done the memory of Herbert Batsford ought surely to be preserved in some tangible form.

T. RAFFLES DAVISON [*Hon. A.*].

REVIEWS.

PULPITS IN ENGLISH CHURCHES.

Pulpits, Lecterns, and Organs in English Churches. By J. Charles Cox, LL.D., F.S.A. With 155 illustrations. 80. 1916. 7s. 6d. [Humphrey Milford, Oxford University Press.]

This work forms one volume in the series of books on the ecclesiology of English churches of the Oxford University Press—an excellent series which does what it sets out to do thoroughly and well—viz., to give a fairly complete record of the various furniture of the parish churches of this country down to about the eighteenth century, with descriptions and illustrations and some comments.

Dr. Cox in his preface suggests that the name of Mr.

Francis Bond, the General Editor of the series, might in fairness be bracketed with his own, and he adds: "to him these pages are indebted for all the labour and scholarly insight involved in the selection and arrangement of the vast number of choice illustrations . . . as well as to corrections and advice in the letterpress."

Both author and editor have produced an excellent and valuable book. It claims to be the first since Mr. Dollman published his *Examples of Ancient Pulpits* in 1849. The first chapter refutes a popular delusion that preaching was a special characteristic of the Reformation period, and it goes on to prove that the exact contrary is the case. The author also adduces evidence "to upset the foolish but often held notion that sermons were usually preached in Latin and not in the vernacular. The fact is that, so far as England is concerned, Latin sermons were reserved for the learned, and that for every Latin sermon at least one hundred were preached in the vulgar tongue."

He goes so far as to say in his preface that "Manuals of the fifteenth and early sixteenth centuries enjoined on the laity the importance of preaching, making it a matter of greater moment to listen to a sermon than even to hear Mass."

To support this statement he quotes from *Dives et Pauper*, which, he says, "appears to have been by far the most popular book of religious instruction in England; first brought out in the middle of the fifteenth century." It is interesting as showing the beginning, excellently meant, of one of the great mistakes of the Protestants, that of confusing the word of the preacher with the Word of God.

It is certainly strange that anyone having knowledge of pre-Reformation times should ever have supposed that sermons were rare in those days. There were books, of course, but, as every copy had to be written, it is obvious that the number was very limited, and consequently the ability to read also limited to those comparatively few who had access to books. All knowledge was therefore very largely imparted by word of mouth. Thus the need for preaching is abundantly obvious, and the mediæval people were extremely practical, as their works bear witness to this day. There is so much to show how deeply the people of all classes loved their churches and how they enjoyed using them that some in the nineteenth century who had suffered much from long and very dull sermons (and I think we all suffered) felt this phenomenon could only be explained by absence of any sermon, and so offered this explanation without further considering the matter and regardless of evidence to the contrary.

Dr. Cox tells us that there are upwards of sixty stone pulpits of pre-Reformation date still left in this country and about a hundred mediæval wooden pulpits, chiefly of the fifteenth century; some few, however, are as old as the fourteenth century.

The illustrations in this book will prove, to those who have not seen the pulpits themselves, that they were intended to be prominent and important things in the

church; many are of considerable size, and as much loving care and enthusiasm has been spent on the design and craftsmanship as upon the font, or the altar.

Those at Nantwich, Cheshire (p. 19), at Arundel, Sussex (p. 21), with its canopied tester, the well-known one at Cirencester (p. 39), are amongst the best of those made of stone, and Fotheringay (p. 71), which appears to be of the time of Edward IV. and has a "small canopy of fan vaulting," which is covered over by another of seventeenth century workmanship, the effect of which in the illustration is agreeable, is a beautiful example of a wooden pulpit.

A few of the wooden pulpits in Norfolk retain much of their original painting; "the most notable example" is at "Burlingham St. Edmund."

The wooden pulpit at Worstead, Norfolk (p. 31), appears to stand independently and to be capable of being moved to any position desired, and so does that at Abbey Dore, Herefordshire (p. 91). The latter is seventeenth century workmanship. It seems probable that down to the fourteenth century most of the pulpits were movable structures placed where most convenient for preaching. There are still some in use; and one would suppose that many more will be used in the future, especially in large churches.

Dr. Cox says of the pulpit at Melton, in Derbyshire (p. 17), that "it is one of the oldest in Christendom." He describes it as "a unique example hewn out of a solid block of oak or section of a great tree, 4 feet 8½ inches high, 7 feet 8 inches in diameter," hexagonal in plan with one side cut out to form a narrow entrance. He dates it c. 1350-60. One would have thought that older examples of pulpits were known, if not in this country at least in the south or east of Europe.

"Pulpits in these pages are followed up county by county in alphabetical order under three headings—namely, mediæval examples of both stone and wood, and post-Reformation instances up to about the year 1700." Pulpits occupy two-thirds of the book; then comes an interesting chapter on hour-glasses, which the author tells us "came into general use in the Church of England in the sixteenth and seventeenth centuries." It is well illustrated, and has something to say about the length of sermons, quoting George Herbert to the effect that too great length maketh "the hearer weary, and so he grows from not relishing to loathing." Excellent advice.

This chapter ends with a list of extant hour-glass stands, and a bibliography. Chapter VIII. is devoted to lecterns of brass and stone. It speaks of the development of the lectern from the ambo of the early church and its use during mediæval times. Many lecterns are described, and a list is given of brass eagle lecterns, including those of the seventeenth century. Chapter IX. is of lecterns of wood, and contains a list of the surviving old wooden eagles, which number about a score. Both these chapters are fully and well illustrated. Beside eagle and pelican lecterns there are several with double or single desks,

the best of which is perhaps that at All Saints', Pavement, York.

Chapter X. is of reading desks, a thing which the old Cambridge Camden Society described, if unkindly, certainly correctly, as an "abomination." Chapter XI. deals with desks for chained books, with two pictures and a list of the more important stands to be found in churches. The last chapter is of organs and organ cases, with several illustrations. None that remain are of mediæval date.

The book is provided with Index Locorum and Index Rerum.

CHARLES SPOONER [F.]

THE BUILDER'S FOREMAN.

The Builder's Foreman. A Practical Guide to his Training.
By J. F. Oultram. With 120 illustrations. 8s. Lond.
1916. Price 5s. [B. T. Batsford, Ltd., 94 High Holborn.]

"The bearings of these observations"—to adapt a famous authority—"lays in the title thereof," the essential of the book being that it is addressed not to budding architects, who hope to devise, but to intelligent workmen, who aspire to carry out. It is quite possible that there have been previous publications from this standpoint, but they have not come in my way.

The preliminary chapters deal with the minor moralities, and appear to a middle-class, middle-aged mind to be rather of the nature of little excursions into the obvious:

"The royal road to success may be summed up in two words, 'Hard work,' and so on.

But later, when we specialise, the advice is pleasing even to the cynical:

In choosing workmen "avoid engaging friends and relations: they will undermine your authority."

"The clerk of works should not be treated as if he were devoid of brains."

Remember that "interviewing architects often necessitates a great amount of tact."

"Idle promises in regard to dates of completion should be avoided."

The technical part of the book (which is the main part) is valuable; there are useful hints on the keeping of note-books and making schedules, points to be remembered in clearing sites, erecting hoardings, seeing after one's comfort in the matter of an office, and arranging plant.

Then, when serious business begins, there is information not only as to the form of shores but as to the difficulties which may arise in erecting them. One is told how to deal with water on the site, and the best ways of forming temporary roadways and crane scaffolding; there is help in underpinning, levelling, setting out, and much else.

The illustrations are either to scale or figured and are clear and very informing. The language throughout is simple and straightforward, and at the end of the book there are chapters on the nice handling of a theodolite and a humble approach to the confines of

the higher mathematics, which may be appreciated by persons of presumably more learning and experience than that generally possessed by the class to which this excellent little book primarily appeals.

HERBERT G. IBBERTSON [F.].

CORRESPONDENCE.

The Longitudinal Rib in Gothic Construction.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—On reading Sir Thomas Jackson's lately published book, *Gothic Architecture in France, England, and Italy*, I find that he takes issue with me on two points of capital importance in Gothic construction—namely, (1) The stiling of the longitudinal rib, and (2) the function of this rib. It will be noticed that Sir Thomas calls it a wall-rib.

On page 39 he says : * "Mr. Moore seems to think that this stiling of the wall-rib, so that the panel of ashlar next the wall rises vertically for some height instead of spreading laterally along the wall, and thereby reduces the width of the conoid of vaulting where it reaches the wall, is a mode of confining the thrust of the vault against the side wall to the area of support given by the buttress outside. In this he is mistaken. The two panels next the wall exercise no thrust upon it whatever, and would stand without it. . . . The stiling of the panels has no other object but that of giving more room for clerestory windows." Now, I have not said that the side panels exercise thrust. It is not a question of the side panels, but of the whole vault thrust. It is quite true that these panels exert no independent outward thrusts, but it is obvious that as parts of the vault conoid they must participate in any movement of the conoid as a whole. In other words, any yielding to thrust in the system as a whole will, of course, carry the side panels with it. The remarks about the panels have, therefore, no pertinence.

That the object of the stiling was not to give more room for clerestory windows is clearly demonstrated by the fact that in the beginning no advantage was taken of it to enlarge the windows, which remain as before, small openings in walls. This is the case in Noyon, St. Leu, Laon, Paris, and all other transitional Gothic monuments. It is not until we come to the fully developed style that the wall disappears, and the whole space between the piers becomes a void, save for mullions and tracery, as at Reims, Amiens, and Beauvais. That the stiling gathers the thrusts on the pier is obvious, and this being so there can, I think, be no doubt that it was done for this purpose. What other rational explanation of it is possible ?

It may be remarked, in passing, that the clerestory opening of a developed Gothic building is not a window at all. It is rather an intercolumniation. To

call it a window is to ignore that skeleton construction which primarily distinguishes Gothic architecture.

As for the second point—namely, the function of the longitudinal rib, Sir Thomas Jackson says (page 255) : "Exception might be taken to some of Mr. Moore's conditions on the ground that an architectural feature is only justified by structural meaning (*sic*). For instance, the wall-rib does not really belong to the vault at all, but to the wall into which it is bonded. It is rather ornamental than necessary. It is often omitted, and the side panel rests on a chase, or set-off, in the wall." But on page 248 he defines what he calls "the constructional theory of a Gothic church in perfection"; and in the course of this definition he says : "The whole width above"—i.e., above the triforium—"which closes the side vault is occupied by an immense window *whose outer arch forms the wall-rib of the vault*." * Now, if this be true, there can, of course, be no wall, and if there be no wall there can be no propriety in speaking of a wall-rib. And if the arch of the opening (misnamed a window) forms the longitudinal rib (misnamed a wall-rib) of the vault, how can it be said to be bonded into the wall ? Since no wall exists, this rib forms the support of the end of the vault cell, and it thus very clearly belongs to the vault, and is in no sense a merely ornamental feature. Sir Thomas Jackson has here forgotten his definition, which is based on the Gothic of the Ile-de-France, and is thinking of English construction, with its heavy clerestory wall, which does not answer to the definition, and is clearly not Gothic construction if the definition be correct.

I may add that this definition bears a close resemblance to my own, given more than twenty-five years ago, in the book which Sir Thomas Jackson criticises. It appears strange that such a definition should have been framed by a writer who includes English and Italian pointed architecture in the Gothic category, for it counters all claim of these architectures to be classed as Gothic. To bring these radically different styles under the general appellation Gothic is to make Gothic architecture a structurally amorphous art. And it is passing strange that it should not yet be seen that just as characteristics of structure differentiate genera and species in natural organic forms, so do structural systems fundamentally differentiate architectural styles.

CHARLES H. MOORE [Hon. A.]

Heat-Retaining Plasters for Inner Surfaces of Walls.

Department of Heating and Ventilating Engineering,
University College, London, 1 Feb. 1917.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I am engaged on behalf of the Committee on Fuel Economy of the British Association in making investigations on the consumption of fuel for domestic heating and other purposes with a view to economising the national resources. One branch of this investigation has as its object to determine forms of building construction which will reduce the

* Referring to my *Development and Character of Gothic Architecture*, pp. 130-133, Second Edition.

* The italics are mine.

loss of heat through the walls of a dwelling house. In this connection I am endeavouring to compare the heat-retaining effect of different kinds of plaster applied to the inner surfaces of walls.

There must be many inexpensive compositions known to some of your readers, which will probably produce a great effect in this direction. I write, therefore, to ask any such persons who are interested in this most important national problem, and who are in a position to submit suitable samples, to communicate with me at the University College.

We have erected in the laboratories here an apparatus capable of making tests of the exact effect of such plaster, and I should be prepared to submit any samples sent to me to that test if it appeared to offer any prospect of success.

May I request you, therefore, to ask any of your readers to give us their assistance in this nationally important matter.—Yours faithfully,

ARTHUR H. BARKER.

An Opportunity for Reviving One's French.

DEAR SIR,—At the present time there are probably a number of professional men who through the manifold occupations of normal times have allowed their linguistic talents to tarnish, and who feel that our future more intimate relations with our neighbours points to the desirability of renewing association with languages other than their own. At the same time any such desire is hardly likely to mature in the direction of attending students' classes or public lectures. To any such colleagues may I be allowed to commend the private tuition of two ladies who are working together, and are prepared to take adult pupils in informal conversational lessons in French at the private house of one of them at Hampstead. One, of French nationality, possesses a long experience of teaching her language, and exercises it in a most practical manner; while the other, who is English, was educated in and has spent many years in Paris, and is a vivacious conversationalist.

Yours faithfully,

F.R.I.B.A.

[Inquiries concerning the above may be addressed to the Editor, JOURNAL R.I.B.A., 9, Conduit Street.]

Free Training of Draughtsmen for Munitions Offices.

Mr. S. B. K. Caulfield [F.], of 23 Old Buildings, Lincoln's Inn, W.C., writes: "There still are vacancies for junior draughtsmen in the various munition offices. I will gladly prepare, free of charge, any members of the R.I.B.A. and A.A. who will come here. The pay, of course is not big, but over a hundred people who have been with me (the majority were women, and could not draw to scale before they started the month's course) were given salaries ranging from 25s. to 3 guineas a week, and all are doing well. Men with a knowledge of motors, aeroplanes, machinery, or shells would have a great advantage."



9 CONDUIT STREET, LONDON, W., 10th February 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Fortieth List.

Killed in Action.

WOODLEY, Second Lieut. STANLEY W., Royal Flying Corps [Probationer R.I.B.A.]. Killed in action 22nd January.

Lieut. Woodley, only son of Mr. W. S. Woodley, was a pupil of the late Mr. G. L. Sutcliffe [F.]. He passed the Preliminary Examination in 1914, and had completed his Testimonies of Study for the Intermediate. Joining the Forces in May 1915, he was granted a commission in the Army Service Corps in the following November. He graduated for a Flying Officer's certificate last June, and had been in France since July. He had done much valuable work at the Front, and had been mentioned in despatches.

Members' Sons killed.

HELDON, Second Lieut. HAROLD LEOPRIC, Dorsetshire Regt., attached to Royal Warwickshire Regt., eldest son of Councillor Horace J. Heldon, J.P. [F.]. Aged twenty.

HOWELL, Second Lieut. ROLAND BASIL, Northumberland Fusiliers.

HOWELL, Second Lieut. NORMAN A., King's Shropshire Light Infantry.

The two last-named were the eldest and second sons of Mr. W. Roland Howell [F.], of Reading, and were both preparing to follow their father's profession. The eldest, Lieut. Roland B. Howell, in October 1915 was reported "wounded and missing," after leading a bombing party, and nothing has since been heard of him. The War Office have now intimated that they are forced to believe that he was killed. Lieut. Norman Howell was home on his first leave from the 6th to the 16th December, and fell within a week of his return.

Awards for Distinguished Service.

ATKIN-BERRY: Captain HERBERT COURTENAY, Staff Captain, Heavy Branch Machine Gun Corps: awarded the Military Cross. Captain Atkins-Berry, the second son of Mr. Wm. H. Atkins-Berry [F.], and a Student R.I.B.A., on the outbreak of war gave up a good appointment as architect in the Malay States and returned to England to join the Forces.

MOSCROP: Captain and Adjutant Wm. NOËL JOBSON, Durham Light Infantry: awarded the Military Cross. Captain Moscrop [Student R.I.B.A. 1913] is son of Mr. W. J. Moscrop [F.], of Feethams,

Darlington; he joined the Forces in August 1914, and proceeded to France in April 1915. He was also mentioned in Lord French's Despatches, January 1916.

Wounded.

DICKSEE, Second Lieut. HAROLD JOHN HUGH, Royal Flying Corps [Student] (son of Mr. Bernard Dicksee [F.]). Wounded in left forearm by machine-gun bullet. Now recovered and preparing to rejoin.

Serving with the Forces.

The following is the Fortieth List of Members, Licentiates, and Students R.I.B.A. serving with the Forces, the total to date being 69 Fellows, 510 Associates, 311 Licentiates, and 291 Students:—

ASSOCIATES.

Dannatt, F. B.: Lieut., R.E. Services.
Hall, Vincent: Sanitary Section R.A.M.C.
Dickenson, W. F.: Lieut., Hants Regt.
Foggitt, G. H.: Royal Engineers.

LICENTIATES.

Dukes, W. B.: M.G.T.O.
Flinn, H. E.: Officer Cadet Battalion.
Sturges, H. J.: R.A.M.C.
Wilkinson, Stephen: Lieut. R.F.C.

Promotions.

Mr. S. Birkett [A.] gazetted Lieut. in the Lancs. Fusiliers.
Sec. Lieut. Cecil L. Wright [A.], R.G.A., from Artists' Rifles O.T.C.

Charing Cross Bridge: The Railway Company's New Bill.

The Parliamentary Committee of the London County Council reported as follows at last Tuesday's Meeting:—

We have been in communication with the Improvements Committee upon the subject of the new Bill, and they have informed us that, after having given full consideration to the matter and having conferred, as authorised by the Council on December 19th, 1916 (p. 1138), with representatives of the various authorities and bodies concerned, they are of opinion that the question of the execution of a scheme having for its object the improvement of the area occupied by Charing Cross station and bridge is one of national importance; that the reasons for the rejection of the Company's Bill of last session apply with equal force to the present Bill; and that, as the works proposed by the company cannot be executed during the war, and probably not for some time afterwards, the Bill should be opposed by the Council on all grounds in order to secure a postponement of the consideration of the whole matter until after the declaration of peace. In explanation of their opinion that consideration of the whole matter should be postponed, the Improvements Committee point out that the present time is not opportune for the public authorities concerned in the future of Charing Cross to consider schemes or enter into commitments for future improvements; that in their judgment the present time is equally inopportune for the company to make application to Parliament for powers prejudicial to any possible scheme of such a nature and not capable of execution until after the war; and that, consistently with this view of the position, the Council should not be asked, as a condition of the rejection or withdrawal of the Bill, to commit itself as to its policy in the matter.

We agree that the reasons which induced the Council to oppose on preamble the Bill which was introduced last Session apply with equal force at the present time, and it

must, of course, be kept in mind that the Bill of last session was rejected by Parliament.

The Report concluded with the following recommendations:

(a) That the South Eastern and London, Chatham and Dover Railways Bill, 1917, be opposed with the object of securing its rejection.

(b) That it be an instruction to the Parliamentary Committee in giving effect to the foregoing resolution (a) that nothing shall be done to restrict in any way the Council's freedom of action in regard to any scheme having for its object the improvement of the area occupied by Charing Cross railway station and bridge.

(c) That in order to give effect to the foregoing resolution (a) petitions be sealed and presented against the Bill.

OBITUARY.

John Hebb, who died on the 27th November last in his eighty-third year, was elected an Associate of the Institute in 1868, Fellow in 1882, and was placed on the list of Retired Fellows in 1902. He was articled to Mr. Edward I'Anson in 1852 for five years, attended Professor Donaldson's lectures at University College, and was awarded a Certificate in the Art Division. He afterwards studied for eighteen months in France and Italy, touring in company with W. Eden Nesfield, George Donaldson, and others, and on his return entered the office of Mr. George Smith as principal draughtsman. During this time he was employed by the Defence Commissioners in preparing drawings of fortifications, barracks, &c. He started practice in 1863, his work being chiefly in connection with business premises and warehouses in the City. About 1876 he became Assistant Architect in the Office of the Metropolitan Board of Works, and on the formation of the London County Council was appointed Chief Assistant Architect, for a time serving as Acting Superintending Architect. He retired from the County Council some fifteen years ago. Mr. Hebb was a keen member of the Society for the Protection of Ancient Buildings. His son, Mr. Oswald C. Hebb, writes: "Of considerable culture and attainment, my father had a graceful talent for versifying and a pretty conceit in parody. He delighted in rendering French and particularly Italian poetry into English verse. He was interested in the pre-Raphaelite movement and in many of its adherents, such as William Morris and his friends. J. McNeill Whistler, George du Maurier, Charles Eastlake, and Pellegrini ("Ape" of *Vanity Fair*) are names I recall in my boyhood." Mr. Hebb served for a time on the Institute Literature Committee, and some years ago was a frequent contributor to the JOURNAL.

Charles R. Baker King, whose death also occurred on 27th November, at the age of seventy-eight, was the senior member of the Associate class, having been elected in 1862. After serving his articles with Mr. Dawkes he entered the office of Sir Gilbert Scott, and eventually became his chief assistant, the supervision

of the fabric of Westminster Abbey being entrusted to his care. He did a great deal of original work, his speciality being church screens, of which that at North Petherton is a fine example. In August last he celebrated his golden wedding, and was present only a few weeks ago at the Jubilee Festival of Christ Church, Brondesbury, of which he was architect.

Edward Cratney, of Wallsend-on-Tyne and Newcastle-on-Tyne, whose death was announced at the General Meeting in December, had been a Licentiate of the Institute, and was only elected to the Fellowship in June last. Though so young—he was only thirty-four when he died—he had achieved a considerable reputation in the North of England, having been successful in competitions for designs of free libraries, housing schemes and various public works. He was awarded the gold, silver and bronze medals for his designs for the model cottages erected at the North of England Model Cottage Exhibition, and was architect to the Newcastle Corporation for their proposed housing scheme at Walker and for the new cemetery scheme at Whitley Bay. He was articled in 1896 to Mr. Stephen Piper for three years, and was transferred in 1898 to Messrs. Hicks & Charlewood to complete. He started practice on his own account in 1907. His executed works included Libraries at Annfield Plain, Hendon (Sunderland), and Monkswearmouth; Council Offices, Newburn-on-Tyne; Secondary School, Blyth; Laboratories for the Thermal Syndicate, Wallsend-on-Tyne; Picture Hall, Wallsend-on-Tyne; numerous houses and cottages in the North. He designed furniture and fittings to most of his buildings, and had laid out various estates.

MINUTES.

At the Fourth General Meeting (Ordinary) of the Session 1916-17, held Monday, 5th February 1917, at 4.30 p.m.—Present, Mr. Ernest Newton, A.R.A., *President*, in the Chair; 22 Fellows (including 14 members of the Council), and 2 Associates (both members of the Council)—the Minutes of the Meeting held 8th January having been published in the *JOURNAL*, were taken as read and signed as correct.

The Hon. Secretary having announced the decease of Edward Robert Robson (father of Mr. Philip A. Robson [F.]), elected *Associate* in 1860, *Fellow* in 1864, who had served as Member of the Council, on the old Board of Examiners, and on various Committees; Joseph Foster Wood, elected *Associate* in 1883, *Fellow* in 1910, sometime President of the Bristol Society of Architects and representative of that body on the Institute Council; Ernest Montagu Thomas (brother of Sir Brumwell Thomas [F.]), of the Public Works Department, Madras, elected *Fellow* in 1913 from the Class of Licentiates; and Archibald Dunn, *Hon. Associate*, elected in 1910, it was resolved that the regrets of the Institute for the loss of these members be entered on the Minutes, and that messages of sympathy and condolence be addressed to Mr. Philip A. Robson and to Sir A. Brumwell Thomas, and to the relatives of the other members mentioned.

The decease was also announced of Edwin Cecil Lawrence, Gilbert Higginbottom, John Powell Edwards, Christopher Adlersparre, and Thomas Francis Hewitt, *Licentiates*.

It was resolved that letters of sympathy be addressed to Mr. W. Roland Howell [F.], who had lost two sons in the war, and to Mr. Horace J. Helsdon [F.], who had lost his eldest son.

The Meeting also expressed its deep regrets at the untimely death of Mr. Herbert Batsford, head of the firm of Messrs. B. T. Batsford, the architectural book publishers, and a vote of sympathy and condolence was passed to his widow and to his nephew and successor, Mr. Harry Batsford.

It was announced that the following Associates had been nominated as candidates for the Fellowship—viz., Percy Morris (Exeter), *Cates Prizeman* 1897, and Christopher William Frederick Wheeler.

The President announced that the Council proposed to submit to His Majesty the King the name of Henri-Paul Nénot, Architect of the New Sorbonne, Paris, as a fit recipient of the Royal Gold Medal for the current year.

The meeting separated at 4.45.

NOTICES.

The Council have decided to issue the *JOURNAL* of the Institute monthly instead of fortnightly until further notice.

A SPECIAL GENERAL MEETING will be held Monday, 5th March 1917, at 4.30 p.m., for the following purpose:—

To elect the ROYAL GOLD MEDALLIST for the current year. The Chairman to move: "That, subject to His Majesty's gracious sanction, the Royal Gold Medal for the promotion of architecture be presented this year to Monsieur HENRI-PAUL NÉNOT, Membre de l'Institut de France [Hon. Corr. M., Paris] in recognition of the merit of his executed work."

A GENERAL MEETING (BUSINESS) will be held at the conclusion of the above meeting for the following purposes:—

To read the Minutes of the General Meeting held Monday, 5th February 1917;

To proceed with the election of the following candidates for membership:—

AS FELLOWS (2).

MORRIS: PERCY [Cates Prizeman 1897, Associate 1897], Devon County Architect (Education), 1 Blackhall Road and 2 Heavitree Park.

Proposed by H. W. Johnson, Arnold Thornely, James Crocker.

WHEELER: CHRISTOPHER WILLIAM FREDERICK, Lieut. A.S.C. [Associate 1902], 7 Stone Buildings, Lincoln's Inn (office now closed), and "Melrose," St. James Road, Sutton, Surrey.

Proposed by Frederick Wheeler, Fred. W. Marks, Matt. Garbutt.

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THE EDUCATION OF THE ARCHITECT.

Discussion at the second Informal Conference held at the Royal Institute of British Architects, 7th February, 1917.

CHAIRMAN: MR. REGINALD BLOMFIELD, R.A. [F.].

THE CHAIRMAN: I need hardly say that the subject we have met to discuss is of the highest importance. It has been closely considered by the Institute for many years past. Turning over some of my papers recently I came across a memorandum on the Report which I drafted, after consultation with many members of the Institute, in 1904. At that date we laid down certain lines on which we thought architectural education ought to proceed: and these were adopted by the Institute, and, in the main, have been followed ever since throughout the country. I think I am right in saying that the high level of competence that one now finds in the rising generation of architects is largely due to their much improved training. I have had some experience of architects during the last thirty years, and I certainly think that the younger men who are now practising architecture are very much better trained than they used to be in my time, when we had practically to find out for ourselves what we wanted to know, in the best way we could.

Still, the organisation and the reform of architectural training which was brought about 15 years ago, though it has done very well, could not stay there. We have to keep abreast of new conditions, new necessities, and we must modify and extend our training to meet these new conditions. There is only one caution I would suggest, and that is, that though modern construction has made extraordinary strides in recent years, and though a great many new materials and new inventions have come into current use, with all of which students ought to be acquainted, yet there is no need, when we move forward, to burn our boats, that is to say, to turn our backs on the knowledge which has been acquired by many generations of hard training and study. I think we shall do wrong if we neglect that. What we have to do is to supplement that knowledge, to maintain the level of that training, but to associate with it a more thorough scientific training. Our students will have to get a grip of these new methods, on the lines that we laid down some years ago, and that must be developed.

To-day, and at the next Conference, I hope those who have any ideas on this subject will contribute

them to the common bank, because what we have to do now in this time of suspense, and in so far as we can spare the time while doing what we can in the service of the country, is to get our ideas together and into shape, so that when things settle down again, we may know where we stand and the line we may have to take.

Professor Simpson was to have been here, but he is laid up with influenza. I regret that, because he was a pioneer in education: he did a great deal of most valuable work at Liverpool, where he laid the foundation of that splendid school which is presided over by Professor Reilly. We have here Mr. Robert Atkinson, whose admirable work at the Association School we all know. I venture to claim Mr. Atkinson as one of the finer products of the re-organised training which the Institute initiated many years back. We have also with us Mr. Davies, of the Board of Education. Mr. Davies has told me a very encouraging thing: that he took the hint of the laboratory building which was suggested by Professor Lethaby in 1904, and that the Board of Education think so highly of the suggestion that they are taking steps to organise these laboratories wherever possible.

We have also present Mr. Roscoe, Secretary of the Teachers' Registration Council. I am afraid I am not a *persona grata* with art teachers: they possibly look upon me as an enemy. What, however, I have endeavoured to do for years with regard to art schools is to get the teachers co-ordinated and graded, so that they may not work at random, and that schools may be got into touch with each other: that the burden may not be too heavy for the weaker man, and that the stronger man may have plenty of elbow-room. That is the best service you can render for the art teachers. I am glad to say that that scheme, at which my colleagues have been working at the Advisory Council at Whitehall, has been accepted, so far as it is possible to accept these things, by the Board. Progress is therefore being made, and I am hopeful that at this Conference and the next we may get some ideas together, which will have to be further studied, and which will be of use in later developments.

Mr. ROBERT ATKINSON [F.], Headmaster of the Architectural Association's School, read the following Paper:—

These remarks which I offer you are necessarily very vague and tentative, liable and even welcome to alteration. I look upon architecture as an art of the future, not of the past alone. We are confronted with problems daily, such, for instance, as aeroplanes; temporary sheds house them at present, but in the near future they will need permanent buildings and landing-places perhaps in cities. An architect should be prepared for such steps in progress. By his training he should be able to foresee or anticipate developments; they do not come without warning, they are purely evolution, their trend is already settled, they need only courage and spirit for their solution, but they need different treatment to anything done before. Our ancestors were in a similar case, and they produced the beautiful solutions which we spend our lives in worshipping and copying, a spirit to be admired, but an almost useless exercise.

Why should we not then move forward as they did; accept our conditions and our materials, use them, and perhaps produce beautiful buildings which will be in the true sense logical?

We are richer in knowledge than our ancestors, richer in materials, in money; are we then deficient in courage, in enterprise, and in taste?

We are torn between our reverence for the past and our modern logical reasoning intelligence; invariably our ancestor-worship wins. How often do we see our modern materials used courageously and properly? What would not our worshipful ancestors have given for our steel, our ferro-concrete, our glass, our asphalt, our asbestos, and our hundreds of new materials?

Evolution has progressed recently by the square of its former velocity, with what result? Since the introduction of steel, tradition, which once kept pace with progress, has been hopelessly outpaced. What a pathetic breakdown was then witnessed! The engineer passed the plodding, conservative, hidebound architect on the wings of the wind; he produced bridges and railway stations before the bewildered architect could collect his instruments or mount his paper.

The engineer showed his naked steel—the architect persisted in hiding it—it was not a traditional material. Palladio or Batty Langley was searched in vain: what could one do with these attenuated proportions?

Result, chaos!

Since that day the architect has never kept pace with his materials; he periodically puts on a spurt to find that the materials he has just conquered are superseded by new, and, like the dog tied behind the express train, prays for a collision.

A partial solution of all these problems lies in the training of the architect; unfortunately, were we to begin to-morrow, it would still be five to ten years before the result became apparent.

I stand then confessed as a supporter of logical training; but how to accomplish it?

By training I mean, of course, the *beginning* of training, for an architect is a lifelong student, *but the beginning is the part which matters*; the first impressions, the glimmering outlook must be the corner-stone, if years, and perhaps lifetimes, are to be saved. This outlook depends primarily upon the ability of the master, but within certain limits a generally similar outlook can be arrived at, first, by the education of the *masters*, and, secondly, by *their* work amongst students.

It is important then to settle in definite terms for the master's guidance an outlook of the broadest possible character and arrange programmes of education which can immediately be put into force; not narrow-minded courses, but courses open to temperament and capable of constant improvement.

Architecture, I am aware, is a complex subject—its side issues limitless, its study fascinating—and life, after all, is very short; but we have men of experience willing and able to save the student useless toil and to give him the benefit of their experience—so only can evolution take place—by enabling each generation to begin on a higher plane.

Elimination of inessentials is the first step in our progress; this sounds simple enough, but in practice may be difficult, because here *taste* plays a part, and taste is an abstract subject shaded according to the individual: generally a majority of opinion can be secured which will point the proper way; and in elimination we have the first essential of education.

Then there is the temperament of the individual students; each needs separate treatment: some are shy, some quick-witted, others dull or thick-skinned or thick-headed. All the traits of human character need studying by the master; he will encourage the shy and exercise severity or even elimination where necessary.

There is the question also of organisation of the machinery of education, a gradual sifting of elements and the provision of higher stages for those who attain to the higher flights. Obviously the higher the grade, the fewer the numbers, and of course the magnet or culmination should be in London.

Who is to provide these facilities?

Beginning with the public schools where freehand perhaps is taught, there follow the local science or technical schools, and finally we reach a stage when architectural training may be differentiated from the technical or art training common to other professions. Thus far I do not call it architectural education at all; but the machinery exists and might be conveniently used to save the expense of teaching such elementary subjects in architectural schools.

Now to begin with the training of the architect properly so called.

Architectural education should be precious and not sold in the market-places to all comers; only those schools which can maintain a satisfactory number of students should be tolerated.

By satisfactory I mean twenty or thirty at the least.

Assuming a three years' day school course, ten students in each year, or thirty in all, would provide the—in my opinion—necessary competition and liveliness.

It is one of the essentials and advantages of a school that a student may see by his side a dozen other men working on the same problems; he gauges his standard and progress thereby and works accordingly. He also sees a dozen possible or impossible solutions, he sees perhaps all the possible impossible solutions and learns a dozen lessons on each subject.

Beyond these schools should be provided that which at present is not—further stages as the student advances.

These would be the summit of the pyramid, organised in London only (for the present), and organised by the Institute itself. From the body of the Institute could easily be selected the officers necessary.

Again, in these advanced studies we need competition, a series of five or six competitive studios each with twenty or thirty students, part or whole time, each under the directorship of eminent architects, each student of each studio ready to swear by his director's advice, jealous of his studio's success and reputation, and willing to work for the good of his studio, if he is careless of his own, each student helped by his fellows and by his director. All these studios working on one programme, judged periodically by the collective directors, criticised and placed according to their logical solutions of the programme, an award perhaps of laurel leaves for the winner, a sufficient reward—the esteem of his fellows.

Such is an outline of my ideals.

To revert to the details of education a little more. I disagree entirely with many of the present methods of teaching—the system of dividing into watertight styles, the divorce of historical architecture and construction—by such methods a student is accustomed to look upon the styles as separate periods beginning at a given date and stopping at a given date, as if history were like the turning on and off of a tap.

Historic architecture is part of the life of its particular period, the influences of daily habits, the capacity or intellect of the people, the materials in use, the methods of construction, and the influence of all these things on the architecture. Teaching should show whether the architecture (design) is deliberate, or dictated by the materials and habits of life. These are of more importance than a string of names of dates, of dimensions, like a glorified Baedeker.

Of what use is it to know all these things without being able to analyse them? To pick out those that are useful and those that are not, and to be able to apply the result to modern problems, this essence of analysis is the faculty which will tend to solve our modern difficulties. We do not wish to become archæologists—at least, except for pleasure).

With planning it is the same thing—we do not study ancient planning for its dimensions—we wish to learn to analyse, to see how the forms of roofing dominated the spacing and shape of rooms, whether the roofs be

flat, domed, vaulted, or columnar, to see why axial lines are maintained and why adopted, to see if parallel axes are good or harmful, to see if in massing the largest rooms have the thickest walls and rise up to a greater height, the use of climax and anti-climax, to see if internal massing dominates external massing, and when external grouping was first developed.

Then follows the grouping of separate buildings, their connection, the domination of the more important, their approaches and the study of the points from which they will be viewed, the deliberate confining of spectators by walls or obstructions to the vicinity of the points of view desired.

Again with historical construction, how can this be forcibly extracted from its setting, set down in textbooks as average diagrams, copied faithfully by students and advanced as evidence of knowledge?

What part of *historical* construction, except, perhaps, masonry and brickwork, applies to modern construction? (Domestic buildings excluded.) Very little. How much of this old construction is obsolete? All but the more simple part of it, at any rate. Who ever uses queen-post roof trusses? Why not then teach historical architecture and construction as one subject and begin *modern construction* on the foundation thus provided?

Let *expression* be a part of our modern construction; let the use of the building, be it library or warehouse, be *expressed* by its appearance and its materials. Why should a steel-framed or ferro-concrete building be clothed like an Italian palace or a Roman temple? Simulating ponderosity on a slender framework: why waste the client's money and floor space?

Why load a framework with unnecessary weight?

Why blot out the precious daylight with simulation rustications?

Why not live the life of the occupant for a few days and learn what *he* considers a good building for his business?

The architect always has a tendency to lock himself up with his books when he prepares his design; why not go out and see life? I mean the life of the intended occupants, the poor devil who has to pass his life in a room with a small window either on the ceiling or on the floor or perhaps even sharing it with another poor devil in another little room.

The architect always has a preconceived notion at the back of his head which he must work off on the first-come, a result of poverty of ideas and lack of logical education.

You will say that these new methods and materials are ugly, that the results will not bear comparison with old. Probably so, but that is the architect's fault. And again, taste is a matter of education: even these so-called ugly things may be so gradually improved—or, if you like, become so familiar—that they unconsciously become better.

Many minor points hang upon these greater ideals. Heating, for instance, is not satisfactory, nor is lighting—I mean the methods of diffusing the light. We

still copy candles because we cannot produce decent electrical fittings. Inverted lighting is certainly an improvement. We worship at the shrine of the past too much, we are not sufficiently materialistic. We should use the past as a step for the future, not look upon it as an unattainable level and say that the next best thing is to copy it blindly. *The past* was not produced by such methods; how then will it fare with the future?

Books are certainly the foundation of an architect's knowledge, but they must be *used, not worshipped*.

Draughtsmanship is another point. There are people who say that the good draughtsman has spent so much time in perfecting his art that he has had no time to learn anything else.

Draughtsmanship is certainly a great help to the architect. It is easier to visualise a building from a good drawing than a bad one, and when not abused the projection of shadows and rendering is invaluable in finding the correct massing of parts and the correct weight and projection of ornaments—always, of course, allowing for that elusive element "taste."

My own experience of students is that the best perspective hand is usually the most prolific designer and the best at the handling of masses, his faculty of "*seeing all round*" being more highly developed than that of his fellows.

I do not enter into minute details of curriculum, they are matters for the schools themselves; but, with regard to the examinations, I believe that if the Institute were more directly connected and interested in education on the lines sketched the examinations would be a truer test of value.

I quite realise that all architects cannot climb to these dizzy heights and that the plodding person is the backbone of the profession. For that reason I think it would be a great injustice to raise the standard of the examinations to too high a level. It would be better to award post-graduate diplomas for, say, design, town-planning, scientific research, or specialised subjects; these would tend to the continuation of studies in the particular line of each student and get rid of the idea now prevalent that once the Final is passed the goal is reached.

Combination in business, too, might be encouraged more than it is; very often a particular person's lack of success is his lack of business ability or some one-sided reason. Why not, as in America, have three or four partners, each a specialist in his own line?

These, roughly, are my ideas on the subject. I do not expect you to agree with them. I am quite prepared to improve them. I do not believe that they are at all final. But I believe that I see clearly a line of progress which, developed on logical lines, will help forward our mutual cause.

MR. ALAN E. MUNBY, M.A. [F.], rose at the instance of the Chairman to read a Report he had been asked to make to the Board of Architectural Education with reference to the meeting of Public School Science

Masters held at Eton at the beginning of January, under the presidency of Dr. Turner, Professor of Astronomy at Oxford. It was an annual conference, he said, which had been in existence for some years, and he had taken part in it in order to see what was being done, and on account of the increased interest in science now being taken by the architectural profession. The Report was as follows:—

"The Conference, which represented all the best-known Public Schools and was very well attended, was chiefly concerned on this occasion with a consolidation of the views of members upon the position and scope of science in a school curriculum, having regard especially to the inferiority of our national attainments in the various fields of applied science, as now so lamentably demonstrated. The chief aim, however, of science teaching in schools was regarded not as that of making scientists but of inculcating habits of methods and general inquiry, of, in fact, teaching boys how to learn, a view which merits a wider acceptance than it at present enjoys, as being the proper function of education. At the same time, the great need for some direct rudimentary knowledge of science was regarded as essential among students who would subsequently have the control of national affairs, in which sphere there is at present an absence of sympathy towards science and a great ignorance of its value.

"In the discussion which followed a Paper entitled 'Technical Bias in School,' I introduced myself as the representative of your Honorary Examiners, and laid stress upon the material and technical needs of an architect's training, pointing out the many problems which the needs of construction and modern equipment involved and how necessary it was that a good groundwork of science be obtained, and how this was helpful and not detrimental to the art of architecture. I further expressed the hope that the Royal Institute of British Architects would be kept in touch with the development in school teaching which the stimulus of the Conference seemed likely to initiate."

If I may be allowed to add a personal opinion to my report, it is that the Royal Institute of British Architects should endeavour to come more closely into touch with our well-known schools, with a view not only of assisting the education of boys destined to become architects, but, by making the profession of architecture better known and understood, help to draw its students from the ranks of the Public Schools to a larger extent.

That much more science is required in an architect's training, if modern structures are to continue to be within his province, will probably be admitted, and much of this knowledge might be obtained at the Public Schools were the Board's Examination framed to require it and made more widely known.

MR. HUGH DAVIES, who was called upon by the Chairman, said that the Board of Education had just issued a Memorandum, dealing with the teaching of

building subjects in technical schools, which would no doubt be of interest to those concerned with architectural education, especially on its scientific side. He particularly instanced the suggestions contained in the Memorandum regarding the establishment, equipment, and organisation of Building Laboratories for instruction in the scientific principles of building and for experimental work on all kinds of building materials, brick, stone, limes, cements, wood, etc. The idea of these building laboratories would not be a new one to architects. In a highly interesting address given to members of the Institute on the establishment of the Institute's Board of Architectural Education in 1904, the present Chairman, Mr. Reginald Blomfield, urged the need of such laboratories for the instruction of architects' pupils. [THE CHAIRMAN: The idea belonged to Professor Lethaby.] It was to be hoped that these laboratories would be established in every important centre of building education, and that they would be used not merely by class students but also by practising architects who wished to carry out investigations on local materials or to conduct research on matters of building interest. The Board's Memorandum also dealt in detail with complete schemes of instruction in building and included many suggestions on matters such as those being discussed by the present conference.

THE CHAIRMAN: We are getting such an immense amount of material that unless we are careful we shall lose our way. I think we might now set to work more systematically. I suggest we try to deal with specific questions, one at a time. We are then more likely to arrive at clear ideas, and shall have our material in a more compact form. I have put down one or two heads as a possible programme.

The first is: How far should scientific training go for the architect? We touch science extensively but cautiously. Architecture, though it has science in it, is an art: that must not be overlooked. In the finest forms of applied science art is implicit, because they are the realisation of ideas in their essential forms.

Another subject is: What relative importance should be given, let us say, to draughtsmanship and the use of the past?

Another: What is the right way to study architecture?

Then we might follow with the organisation of schools, which raises a tremendous question, because out of that would arise a question which was raised by Mr. Atkinson: How far it is desirable to deal with architectural training in preliminary education.

Then we come to the part which we are more competent to deal with, that is the organisation of our own schools. And I hope the point which was raised by Mr. Davies will not be overlooked—namely, the question of the organisation and co-ordination of the schools throughout the country, reckoning our own architectural schools as important factors in the art schools of the country. Mr. Davies touched on the

difficulties of less favoured students to get from one stage to another.

I suggest that we deal with these topics systematically, and that we now proceed with this question: How far scientific training should go: what sciences should be taught the architectural student, and in what way? I call upon Professor Adshead.

PROFESSOR S. D. ADSHEAD [F.].—In view of the interest that is at the moment being concentrated upon improvements in the so-called scientific side of an architect's training, I propose to submit a few remarks which may help to remind us that architecture is an art, and in its highest aspect a fine art and the mistress art. In so doing I would direct your attention to the KALENDAR, and therein to the short preface to that section which deals with Education, which, to my mind, contains a definition of architecture distinctly open to criticism.

But I would like it to be understood at the outset that I thoroughly appreciate all that has already been said with regard to the importance of making the scientific training of an architect more thorough, and also that I regard our present educational system in its general working through the schools, and as fostered and guided by the Institute, as exceedingly good. Though not a teacher of architecture, I speak with some practical knowledge and insight, having been for some years in very close touch with two important schools. But in my appreciation of what is being done I would go further, and would say that the high ideals of the schools to-day, and indeed of the Board of Architectural Education, are in advance of those set up in the short treatise referred to. The principles of architecture there defined are to my mind narrow and of a partisan character.

I do not regard this as an occasion for suggesting possible improvements in courses and administrative methods. What I wish to say is directed to a nicer appreciation of fundamentals.

Let us turn to the KALENDAR and note what it says on the general question of Architectural Education. It tells the prospective student that the training is to be governed by the principle that construction is the basis of architecture, and its correlative principle that architecture is the interpretation of construction into forms of æsthetic value; that the student should be trained in construction, that he should be introduced to examples of architectural form which illustrate the solution of building problems in the past, and that the genesis of these forms is construction, and so on, in the same vein.

Now I submit that this is a partisan view. I submit that it defines the principles of architecture only as understood by certain schools, possibly Neo-Gothic sections of the Gothic revivalist movement, the Secessionists and others whose architecture, it seems to me, aims merely at the achievement of mechanically manipulated detail and the literal expression of how it was done. The interest it arouses is consequently limited

to an interest in methods of execution—a mechanical petulance.

It is a dangerous doctrine, for I submit that if the word construction means here what architects usually understand it to mean, the resultant architecture could never reflect those flights of the imagination which, as the mistress art, it alone can rise to.

No, architecture is not based on construction, on the spacing of stanchions, on the jointing of girders, on the depth of beams and the spans of trusses. It is a medium of emotional expression giving utterance to phases of the fancy, arrived at like all the arts by processes of suggestion. It suggests phases of human thought, aspects of mind, conditions of temperament, states of conscience, and particularly such as bind us to this earth. And construction is nothing more to architecture than the peculiarities of paper and pencil are to the draughtsman. Construction merely controls the method and defines the medium of expression. It has nothing to do with the thing expressed.

The Parthenon, the Pantheon, Genain's Library, the Pont Alexandre, Paris, and the spire of Salisbury Cathedral are not only pieces of construction aesthetically expressed; they are much more—they are imaginative conceptions submissive to the limitations of the material of which they are constructed; and therefore it is my view that at the outset of a student's career he should be taught that architecture is akin to the fine arts; that, like painting, music and sculpture, it is an emotional art, and that the kind of emotions which it can arouse are closely related to those which are aroused by reference to history and tradition; that being more dependent for its expression upon material than are painting and sculpture, construction and a knowledge of construction are absolutely essential to its practical realisation, but nothing more.

Again I submit that what we want to do is to improve our educational prospectus, and insist more emphatically that architecture is in its finality a fine art.

THE CHAIRMAN: With a great deal of Professor Adshead's Paper I sympathise entirely. I devoted two years' Academy lectures to driving that in to the best of my capacity, and at very considerable length. Still, I do not know how that comes into my suggested programme. It is easy to branch out into an immense discussion as to what architecture is, but I do not think it is the subject we have to deal with to-day—unless you like to take a general discussion on architecture.

MR. ADSHEAD: I launched that criticism in its reference to the introduction of architectural training as set out in our KALENDAR. I think it should be revised, and that we should look at architecture more as an art than as good construction.

MR. H. V. LANCHESTER: I feel that until we have got our ideas clear as to what architecture is, until we are a little more definite on that point, it is almost impossible to discuss the other.

SIR JOHN BURNET, R.S.A., LL.D. [F.]: Would it

clear matters if the meeting were to come to the conclusion that it should talk of architecture as a craft, and of the architect as an artist who can exercise the craft? We have certain very practical and definite responsibilities towards our clients, and to meet these responsibilities we need to be educated; but we cannot make our architecture "art," as we cannot make ourselves artists. Do you not think we could settle down better to a discussion on architectural education if we were first fairly unanimous on the nature and number of these responsibilities? We could then eliminate the terrible question as to whether architecture is a "craft" or an "art."

THE CHAIRMAN: The question is: What is the technical equipment of an architect?

MR. GERALD HORSLEY [F.] offered some remarks upon the courses of instruction at the Ecole des Beaux-Arts, Paris, but agreed at the request of the Chairman to defer them to a later stage of the Conference, when questions connected with the constitution of architectural schools would be considered.

THE CHAIRMAN: It is very important to know the opinion of members of this Conference in regard to the teaching of science to architectural students. We have never quite grappled with it, as to how far it should go, where it should stop, what is essential, and what the student can do without. Perhaps Professor Lethaby, who has studied and has definite views upon the question, would speak upon it.

PROFESSOR LETHABY: I feel that it is false to set up an opposition between science and art at all in these matters. What should be meant by science is generalised or theoretical knowledge or preparatory knowledge, going very far. But science, in its application, is an art, such as the building art. The knowledge preliminary to the laying out of a great bridge, the knowledge of metals and of stresses, is science: but the putting it into operation, the building of the bridge or of the battleship, is an art. It is mere obfuscation and obscurantism and everything bad, this suggested opposition between art and science. I would make the teaching of architecture wholly science. When that comes to be applied, it will become an art. By saying I would make the teaching of architecture wholly scientific, I do not mean the learning about the science of geology, for instance, but I would attempt to set out the real science of building: the exploration of the possibilities of planning through an architectural geometry, and that sort of thing: to know the possibilities of designing through the mechanical necessities of structure, and so on. I would allow no taste to come in in teaching. Some day we shall come to realise that we have been dealing with a contradiction in terms, for all teaching is scientific: you can teach nothing but science, and to teach science is to open the way to art and temperament, to taste, or whatever you like to term it. It is always there, and it will always come in. You are giving the man the means, and nothing else should be taught but science. We had a very interesting, com-

petent and remarkable Professor of Painting visiting this country from Brussels, and he said exactly the same thing about the teaching of painting, that they were coming to the conclusion in Brussels that what should be taught was the science of painting, and that the artist had the rest of what was required in himself: he had temperament, genius, or whatever you like to call it. They had come to the conclusion that it was their business to teach the science of painting. In the same way, I think, we shall have to come to the conclusion, some day—it may be twenty years, it may be 200 years hence—that the only thing which can be taught in architecture is the science of it, science all round: geometry as applied to it, mechanics as applied to it; but that does not ignore the question of the art, or the temperament, or the genius: it opens the way to those qualities.

MR. F. ROSCOE, Secretary to the Teachers' Registration Council: The question of the relation between science and art is one which has troubled men from the earliest recorded times, and we have to determine how much, if at all, the study of science is of direct help to the artist. In Herbert Spencer's book on Education in which he advocates the teaching of science, he refers to the well-known statue the "Discobolus," and says that if the sculptor had possessed a rudimentary knowledge of science he would have known that after throwing the disc the man must inevitably fall to the ground; but Herbert Spencer probably overlooked the fact that on releasing the disc the athlete would have moved his foot and so have preserved his balance. The artist knew this and was not thinking solely of the mechanical science. I therefore suggest, although with diffidence, that sciences never generate arts out of themselves. Science is organised knowledge. You can work backwards from art to science but you cannot work forward from a science to an art. I agree with Professor Lethaby that in the relation between science and art everything depends on the artist.

This is capable of very broad general application, and I think it applies to architectural training, as to all education. The radical defect of all education, as I see it, is that it tends to attach far too much importance to the grammar of subjects, and too little importance to the subjects themselves. For instance, the Early Renaissance enthusiasts were enthusiastic for Latin and Greek literature. Very soon someone arrived—his name was John Stürm, a German—who had what we regard as the characteristic German habit of organising and systematising. He systematised Latin and Greek grammar. Having worked back from the art of literature, he cut it up into convenient chunks, and had it taught in a large school at Strassburg. Then he found he need not have very well-qualified teachers, because anybody with sufficient industry could keep sufficiently ahead of his pupils in his little compartment of the subject to keep him going. That was an enormous success, and the

result was that the method was imitated all over Europe. Thousands of boys under the pretence of learning Latin and Greek in this country are not learning Latin and Greek at all: they are occupied with learning rules and exceptions to rules in Latin and Greek grammar. You see what harm you can do by emphasising the rules of grammar, and forgetting the thing which is behind the grammar, a very much more important matter. It is to bring about some relationship between the necessary elements or rudiments of a subject and the subject itself which is the supreme problem of education to-day. In every school we need that. Boys go to school keen, full of curiosity, having pestered their parents for years with questions. But they leave school not desiring to ask questions any longer, not wanting to know anything. That is one of the results of our present methods in education. It turns an alert, bright, questioning boy into a dull student, one with a limited outlook. His view is changed because he can now only look at the things which education has prescribed for him. That is the danger of all technical instruction. You can give a pupil most accurately and fully the science of architecture, the knowledge underlying his craft, but unless he can proceed and gather instruction from the practised craft, he is not going to become the finished product which you desire him to be.

So I submit, sir, that the scientific training which does, of course, underlie every art, even down to the sweeping of the road, must never be undertaken except in constant relation to the actual art which is contemplated. That is why I am so glad to hear Mr. Davies say that the Board of Education no longer favours the idea that all students in a school can be classed and massed together to learn mathematics and science, and afterwards separated into architects and what not. The sooner you get the student learning mathematics and science in the atmosphere of his future calling the better he will learn his subjects. I am aware that I am rather dogmatising, which is the last thing one wants to do in connection with education, but what I am about to say has a further important bearing on the question.

It is unfortunate that science is easier to examine in than art. I have myself been an examiner for many years, and I know how easy it is to examine in science. I would rather set a paper on English grammar than on English literature: and any of you, I take it, would rather set a paper on the scientific part of architecture, which can be done up in neat little parcels, than set a paper which requires thought and judgment in seizing the point of the answers given. And the conclusion I reach from that is, that examinations should follow the curriculum, and not determine it. You must decide what is the best training for an architect, and make the examinations fit the training—not make the training fit the ideal examination. If you think too much of the science underlying the art and the craft of architecture, your examinations

will have too much science in them, and the training will have too much of it, too: the training will be insulated from the reality of the art itself.

Herbert Spencer said that if we all knew the workings of our bodies we should be healthy folk. I do not know about that. There is an art of life, and doctors, who may be presumed to know about their bodies, do not all practise that art in a way to arouse our admiration. And so it is with the question which is before us now. The value of science, in any form of training, is strictly limited: it is limited by its immediate applicability to the purpose involved. And, further, I think that the continued interest and zeal of the student largely depend upon his appreciation of the continued applicability of what he is learning at the moment, the purpose in his chosen calling. I am against the attempt to teach detached science, in any shape or form.

THE CHAIRMAN: I think there is not the conflict of opinion which might have appeared to Mr. Roscoe to exist. As I understand Professor Lethaby, I think his views and Professor Adshead's are reconcilable. Sir John Burnet put it in a concrete way when he said let us look upon it as a craft. Professor Lethaby said science is necessary for the architect as part of his technique, so that he can use his materials properly. He is not expecting that we shall all be scientists. Still, we all feel that every competent architect in the future will have to know his way about in the scientific treatment, and how to use materials to the best advantage and shape them to the best form. I sympathise with both Professor Lethaby and Professor Adshead: both are driving on to the same thing, from two points of view, and out of them we shall get the right way to the science. The test of the scientific knowledge will be the use we make of it.

[The Chairman here apologised to the meeting for having to leave the Chair to fulfil another appointment, and Mr. Lanchester at his request took his place.]

(MR. H. V. LANCHESTER, IN THE CHAIR.)

SIR JOHN BURNET: I have felt very strongly upon the subject of architectural education for many years, and I think we must be borne with if we become a little scientific for the moment, on the ground that we have been fighting a battle for some years on what, I hope I am not offending anybody by calling, the stylists' view. It is our first duty to be intelligent citizens, keen and sympathetic students of the requirements of our time. To this end it seems to me a higher standard of general education should be required of our students before they enter upon their architectural studies.

I thoroughly appreciate what has been said in reference to the Ecole des Beaux-Arts, and the system of monthly "projets" which form the background of the course of study there, but as one of the few students from this country who committed themselves to the whole course, I would like to express my belief that

these "projets" are intended to indicate to the student the part that arrangement-of-plan plays in his "art," and that he may appreciate how far he has profited in design by the study of those books illustrating the subject, which are available to him, and, along with his drawings from the cast and his modelling, are together, exercises in design and technical methods of expression.

The more important part of the course seemed to me then, as a student, and still seems to me, to have been the lectures to be attended on History, Higher Mathematics, Stereotomy and Construction, with their final written, and oral, examinations, the failure to pass in any one of which meant being "sent down" for a year; and the satisfaction and enthusiasm with which each student entered upon his final "projet," the "Projet of Construction," which indicated his progress alike as a designer and constructor, and enabled him to pass into the first class, showed, I think, that others held the same opinion. It is the lectures, and drawings made for them, and the examination before and after the "Projet of Construction" that teach the student his craft. The "Projets," drawing from the cast, and modelling, are all influences, the power of which, like the books he studies, his fellow students in the studio, and the distinguished architect in whose studio he works, must always depend upon the nature of the student, and his ability to profit by them. The first makes it possible for him to practise the craft of architecture. The second affects only the way he does it; if the second course is earnestly followed his work should bear the stamp of "culture," or it may be of "genius."

Having referred to the Ecole des Beaux-Arts at such length, I must admit that the Professors of Construction and History were in their respective spheres consummate artists—M. Brune, the Professor of Construction, left the Ecole St. Cyr as one of its most brilliant students, and it was said that he immediately applied to the secretary of the Ecole des Beaux-Arts to know in how short a time the Prix de Rome in architecture could be taken; on being informed that the shortest time in which it could be taken was two years, he enrolled at the school and took the prize in that time. As Professor of Construction his class was one of the most interesting in the school. He seemed to know so well how to rouse the interest of the students in his subject, and without taking them too deeply into the problems of engineering to give them a sound knowledge of the laws that underlie its practice.

I do not understand about those laboratories which have been mentioned. If they are organised to give their students what may be called the "shop traditions" of the crafts, it seems to me they will be intensely useful. But I would set that as altogether distinct from "research laboratories" in which materials could be tested and the laws which govern their combination explained. We say to our client: We propose to make a design realising your requirements; we propose in that design to enlist the capaci-

ties of an indefinite number of crafts, and to make them work together harmoniously to one end. If we propose to do that, we must be sufficiently familiar with the traditions of those crafts to appreciate their possibilities—they must be at our fingers' ends. And that can be taught in schools, and I think it should be taught by very constant visits to the more unusual structures (usual structures for the junior students, but the more unusual ones as students grow up). No man, I think, can write a specification unless he has some real knowledge of the ordinary practice and "traditions" of the crafts. We do not undertake to change those "traditions" or practices, we accept them as they stand, but using them for our clients' purposes we may put before the craftsman new problems, giving him interest and pleasure in its execution. I have been surprised at the pleasure with which good craftsmen, of one craft or another, noticed any new sphere in which they were called upon to act, any sphere which to them seemed to put them on the strain. They recognised it as a strain, perfectly legitimate to their craft, but they enjoyed it and were proud of the result. All the necessary functions I speak of can be taught in the school. The way in which they can be applied subsequently in practice must depend on the individual. I do not think that in anything you can do more than teach the students these so-called scientific truths. Many students will never get past the expression of the science they have been taught; but at any rate they may be trained to give cultured expression to their ideas, and so may recognise "genius" when it turns up, and that is not altogether an unhappy position. We must admit that men may come into the spheres for which we have been trained, who, so far as our knowledge goes, have had no science training, and yet can express themselves in a way not possible to us. There is something in them which makes their capacity different from ours; all we can do is to be thankful that we are able to see it. I do not think the standard at the Royal Institute is high enough; it should have the highest ideals in education. I think the standard should be much higher and yet give a man no further education than he needs to make him a respected member of the profession. Whether it should be in the form of post-graduate study or not I do not know, but I would like to see some element in the course which passed the student into the University, it might be, by way of a diploma, or an honours course; or the student might take his B.A. or M.A. with an art subject before entering as an architectural student: some method by which our education would be not wholly dissociated from the education of other professional spheres. In that way other professions would know what it meant to be an architect, and our work and our responsibilities would be better understood and appreciated by the public and our advice more generally sought.

MR. A. E. RICHARDSON [*F.*].—Mr. Atkinson's

remarks demand very serious consideration, especially as they enable us to visualise the limitations of the existing system of education. I should like to say that training in architecture, other than the rudiments of the art, is largely associated with the science of the mind. It is primarily a question of perception, taste, investigation of history, acquaintance with physical laws, and, above all, a profound study of humanity. As the individual develops his perspective of social conditions, in proportion as he increases his power to conceive, he begins to grasp actualities with certainty, and through the joint agency of precedent and tradition designs anew.

The education of the individual is purely personal, depending entirely on logical reasoning combined with ability to sequester one object from another, to amalgamate conditions which at first sight appear disproportionate, governed invariably by those rare flashes of inspiration which alone beget articulate composition.

The issues raised at this conference do not concern the training of the individual, for the genius has the power to educate himself. They turn rather on the greater issue of collective training. The important duty before us this afternoon is to inspect the crude machinery that has served up to the present to equip the generality of students.

There was a time when everyone in England from the client to the carpenter had an idea of architecture; this is equally true of France, where it was possible for Antoine, a carpenter and supervisor of building accounts, to model his designs on those of the scholarly Gabriel.

I shall endeavour to compare the methods of architectural education that pertained in the eighteenth century to a simple machine with an automatic movement. It worked comparatively smoothly from the time of Wren to the Regency. But the later mechanics were not satisfied with the simplicity of this contraption, the age of steam demanded an acceleration, so they yielded to force and added cog on cog, which only increased friction and retarded progress. During the past decade, such was the worn condition of the parts of this machine that a partial adjustment was decided upon, together with a new kind of lubrication; but now, in view of what is urgently required, this apparatus is not adequate to its task. It is sound economy to install a new plant, but we must incorporate the good points of the old into the arrangements of the new.

Leaving metaphor and coming to facts, it is not the function of this Institute to do more than augment the curriculum for the R.I.B.A. examinations, and to act in an advisory capacity to the many excellent schools now flourishing.

The limitations of the present system of training afford an interesting contrast with the way architectural education is dealt with in France and America.

True architecture is the outcome of fertility of the soil, but it also depends on the nature of the seed;

hence we find, in this country, a tendency to specialise in produce which stultifies rather than aids healthy development.

Solely for convenience in teaching, the manifold aspects of architecture have been arranged in a number of compartments; for example, construction, materials, sanitation, and other details form separate groups, the investigation of history is in another section, and design is expected to take care of itself. This, I submit, is the root of the trouble.

All the attributes that form part of an architect's equipment should be subordinated to the dominant factor, design. Concept, supplemented by reasoning, is the basis of architecture.

The investigation of history must be approached with a view to studying only the finest expressions of past activity. The student should not be bewildered with a catalogue of dates and facts; he should be trained to assimilate underlying principles of historic examples, and be guided to adapt old theories to new conditions. All the great periods in architecture owe some part of their vitality to methods of investigation and emulation. Yet it is strange that in some quarters this creed is not encouraged.

It is reasonable to suggest that the leading schools should be brought into closer touch with the Institute, with the Royal Academy, and with each other. There must be vigorous and healthy competition between themselves and groups of earnest students, augmented by public exhibitions and constructive and fearless criticism from distinguished architects.

In addition the Institute diploma should be raised beyond its present status, which enables a man of average proficiency to practise. A special certificate should be given for a diploma course of not less than a year, undertaken at a recognised school, the minimum age limit to be twenty-five years, and only those students who submit three designs during this period of training to be eligible for the studentship prizes.

Further, we must think Imperially, if we wish to anticipate the unprecedented developments that will without question take place in the Dependencies and Crown Colonies after the war. It is not Utopian to imagine London becoming the centre of architectural education, for talent in this country is unique and inexhaustible.

Regarding the remarks made by previous speakers concerning the functions of the architect being usurped by the engineer, I should like to point out that in the Victorian period the engineers very eagerly consulted the architects on questions of practical utility. It is known that when Dobson was designing the Central Station at Newcastle the engineers were in a quandary regarding the curve in the main line; they appealed to the architect, who adjusted the railway tracks for them and incorporated the rails into his scheme for the station. The engineers were not churls, and acknowledged their obligation to the architect's taste. Philip Hardwick was advisory architect to the London and Birmingham Railway,

Mocatta to the London Brighton and South Coast, Sir Gilbert Scott to the Midland, for whom he designed the grand iron vault in collaboration with an engineer, and Mulvany and Sancton Wood both advised the railway companies in Ireland. This is proof of the fact that the practical mind is not always capable of hitting off the most fitting solution of a mechanical problem.

MR. ALAN E. MUNBY, M.A. [F.]: I think there is a tendency for our discussions to wander into purely academic fields without crystallising, and I would like to draw attention to one or two things with the object of arriving at some definite result from the scientific point of view.

Mr. Davies spoke of the Research Council. The Institute has a Committee which is dealing with that Research Council, and I hope that Committee will be able to produce some results: it has already had a number of meetings. One of the subjects of its deliberations which is suggested at the present time is in connection with the education of an architect, so far as that is applicable to its terms of reference, so that we may see how far the work of the Research Council is capable of being utilised in connection with architectural training. I think it probable that the Institute Committee referred to will bring up some sort of report, which may come back to such a Conference as this.

With regard to general scientific training, I am certain the Public Schools could do very much more for us than they are doing at the present time, if we put the matter before them properly. I agree with the definition of science, in its broadest way, that it is simply "knowledge." But if we stated what natural sciences we agree are necessary, the Public Schools could do much more, by organising their forces. But one should not introduce professional education at a public school: that would be wrong. If, however, a youth stays at school until he is 18 or 19 years of age, his education during his last year or so might be given a definite trend in the direction of his intended profession. In that way he could be given that scientific knowledge which would be specially useful in his professional work. There is no doubt that in the Institute Examinations, as they stand, natural science is not enough emphasised. Take the hour's paper in mechanics which we used to have in the late Preliminary Examination; it gave no idea of the importance of science work in architectural studies. I do not think anybody contends that science is the main feature of architecture, but you cannot do good construction without a knowledge of science.

I will give you one instance of the way in which these things are dealt with in other places. In 1912 the German Government gave a grant in Dresden for the erection of a building for the study of architectural acoustics, a subject which is still very obscure. We put up buildings in the most cheerful way without having any idea of their acoustic properties, and we

know of many buildings which cost hundreds of thousands of pounds which are failures from the acoustic point of view. But here, in Germany, is a building where the Government is subsidising, on a large scale, the science of acoustics. Why could not we do that? That is the kind of thing on which the Government is prepared to spend much more money than has been spent so far, and our Institute Research Committee is about to lay this matter before the Advisory Committee of the Privy Council with a view to some specific action. There is no reason why we should not have an institution like the one referred to here in London.

To turn to another subject, I think we could do more with our Library. On the scientific and technical side the Library is very weak, and one does not feel that the Library Committee displays any interest in this direction. I suggest that this Committee might make a special study of the Patent Office Library.

I do not know whether I may say anything on examinations, but as an honorary examiner for some years, though only in a small subject, I would like to say that the "Thesis" in the R.I.B.A. Final is, as far as my experience goes, an awful fiasco. The theses I have to examine—and I am speaking as a man who knows what examinations are—are too often merely a collection of facts from a text-book, which anybody could do in ten days or a fortnight. Those theses constitute a travesty of the name. My idea of a thesis is a contribution which the author takes two or three years over, continuing to work at it during all that time more or less, something which is good enough to be published, and which would do an architect credit. I have had theses sent in consisting merely of ten sheets of foolscap paper, scribbled in bad English. I think if a man cannot do better than that with a thesis, it is better for him not to attempt it. The whole idea of this examination should be revised, perhaps, as some speakers have said, making it a post-graduate course, but making it a contribution to architecture itself.

SIR JOHN BURNET: This meeting shows how wide the scope of these Conferences may be. It is to be hoped that the subject may be considered sufficiently serious in these discussions to have a Committee appointed, on which perhaps professors in outside schools might be asked to serve, to consider not only what the architect should be, and can be, educated to do, but how his education can be correlated with the existing schools, taking the student from the time he leaves school, going on to the secondary school, the technical college, and even to the University.

THE CHAIRMAN: The idea of these Conferences is to get the broadest outlook on the whole subject, and we should be ill-advised if we stopped with the Conferences and failed to go on and achieve some practical

result after we have had time to digest the comprehensive and most interesting expressions of view we have received to-day. I think we may say certainly that what has been said at this Conference must bear fruit in the future. We here, and we as an Institute, will do all that we can to arrive at some practical result.

"Informal Conferences" at the Institute.

To the Editor, JOURNAL R.I.B.A.—

DEAR SIR,—Living in the country one rarely now has the pleasure of attending meetings of the Institute, but interest is keenly revived by the publication in the JOURNAL of last month of the report of the first of the series of conferences opened by Professor Lethaby and Mr. Henry Wilson. To seek to vitalise the thought of any body of men or of a people is a great enterprise; and if successful, a notable achievement. The war is drawing all men more closely together, and each is finding more in common with the other than he before perhaps thought possible—hence, pregnant opportunities. This applies most of all to the men who touch real things and issues, as in the fighting line. There, it is the man that tells. So also is it in the practice of architecture:—and, as one of the after speakers aptly pointed out, we want to meet more with and find common human ground with the several bodies which officially largely regulate and control the conditions under which we work and live.

I remember Mr. Selwyn Image at the Institute a great many years ago remarking how much our views undergo change when we meet people in the flesh and face to face, and in connection with this he told an old story of Charles Lamb. Somebody had been running down a certain gentleman whom we will call Mr. Brown. Charles Lamb got into a furious temper, exclaiming "I hate Mr. Brown!" The gentleman replied, "You cannot possibly hate Mr. Brown—you do not know him." "Know him!" exclaimed Lamb, "how could I hate him if I knew him?"

Don't you think we must insist less upon what is vicariously designated architecture, and more upon the needs of humanity and the general well-being of each other and of the race; all of which may be expressed in many forms of speech and in many directions of effort? On this broader human issue, surely each of us has something to say; and we must be as ready to learn from as to teach, official as well as our own more directly professional bodies.

All who are not fossils are students, so long as the power of thought or expression remains with them; but the cruder or more professional form of education, while necessary perhaps for the study of any specialised subject, often tends to restrict and narrow the natural impulses of the mind, except that it be founded upon something broader and more inspiring than the purely professorial—that is, upon love of and reverence for enduring things, upon sympathy with, or at least

knowledge of, mankind and humanity and their often seeming divergent but really uniform aims. If we can but think bigly and humanly we shall achieve bigly and enduringly; or, as an old poet and painter once said to me, "If a man has really something to say, something that the world is waiting to hear, then the means to express the thought will not be wanting."

This is what I think underlies the teaching of Professor Lethaby and Mr. Wilson. They want to get at the heart of things and to see things as they are: to be less burdened and concerned about unreal things, and to look at life and life's work with the clear trustful eyes of little children.

Even more than to do things beautifully, we want to do them well; and if we first do them well then the beauty will come without effort, and almost without our knowing. To posture is fatal: we want much to seek after that unconsciousness of self, which is alike the beauty of childhood and the child-like mind. Bones, ligament, muscle, flesh, and the amazing intricacy of the blood-vessel and nerve truly make up the physical man, but they hold and house those intangible things we call spirit and soul. The music of the violin is greater than the body and strings, greater than the creature of Stradivarius himself; and is not the beauty of architecture but the music which is the soul of the ordered structure built well?

At the very beginning of the war Mr. Asquith permitted himself to say a notable thing; and as nearly as I can recollect the words, they were these, "Those who do not apprehend the spiritual aspect of the war fail to realise its deepest meaning." So it is with architecture.

Professor Lethaby enumerates a number of abstract qualities essential to good work. One other, and a forceful one, we must accept from without, namely, "organisation." To-day we meet with it everywhere, in the war, in the great industrial works, and in emporiums. It is these needs we architects are called upon to house. The modern shopkeeper often only desires that his building has the quality or power to arrest and attract attention, more effectively even than does a string of sandwich-men in all the glory of their boards. But anything that is in itself *outré* or based upon novelty, is also in itself thereby fleeting and unenduring; and surely hankering after the *outré* is just the quality Professor Lethaby rails so forcefully against in much of the building of to-day.

A church fitly built expresses reverence and worship; a public building so treated, restraint and dignity—in other words, good-breeding in architecture; and good-breeding in architecture, as in other things, is a quality to be esteemed much more than the grandiose, the trivial, the blatantly aggressive, and the essentially vulgar. Is it not, however, in the realm of the domestic dwelling, of whatever scale or size, that there is to-day expressed the most deeply rooted and essential charac-

teristic of our race; and consequently, in it is rendered our most successful national architectural achievement. For to-day the home takes precedence of the church, because to-day its roots sink most deeply into the human soul, just as its fibres bind most surely; moreover, it embodies and expresses most truly, because most simply, and therefore profoundly, faith and trust between man and woman and between man and man; and so is, at once, altar and ritual in the worship of Almighty God. Few see clearly, and fewer still truly; but we can all cultivate the faculty of seeing: while sometimes one may be even taught to see, as was Elisha, and Elisha's serving-man; nor can we ever while life lasts forget Blake's vision of the rising sun. It is this lesson, perhaps this vision, Professor Lethaby and Mr. Wilson may seek to convey to us; that we, as also they, in learning to see better may also learn the better to do.

I remember very many years ago now, going one night to the Institute to hear Mr. Wilson read a paper to the Architectural Association. I forget what was the subject, but it was in regions well above our heads. Those who afterwards spoke, inferentially confessed as much. It was not practical enough, they said. On another evening I heard the reader of another paper, at the Institute I think, and by someone who also was not a crude architect; the title I forget, but it dealt with the architecture of a past day. The reader, I remember, at one part spoke of an ancient castle and moat, of the rich greys and yellows and browns of the stones; the beauty of the lichen, the luminous shadows, and the glories of the deep reflections in the moat; the changing lights, the ruffling of the surface calm by a gentle passing breath of wind, caressing rather than disturbing; but perhaps most sympathetically and understandingly of all, he told of the beautiful white water-lilies, and the delicate freshness of the green in their leaves; of the mystery and loveliness dwelling in all living things.

Again, as before, one of the after speakers complained that it might be all very beautiful, but that it was beyond them. He confessed he had hoped to hear more about the things of value and which they wished to understand better; the forms of the several openings, the fenestrations, their mouldings, evolution and dates. Then crossed my mind the words of an earlier Teacher, "Consider the lilies of the field, how they grow; they toil not, neither do they spin: Yet I say unto you, that even Solomon in all his glory was not arrayed like one of these." Because we miss the humanness of mankind and the life vivifying alike animate and inanimate things, because our eyes are sometimes, even as artists, heavy and dull, we see often only the cerements of the dead and miss the living, breathing, voiceful soul. Surely we owe Lethaby and Wilson a debt for calling us again thereto.

JAMES A. MORRIS, A.R.S.A. [F.].

THE HEATING AND VENTILATION OF SMALL SCHOOLS.

By PERCY MORRIS [F.], Devon County Architect
(Education).

The subjoined Memorandum upon the Heating and Ventilation of Small Schools, written in December, 1915, may be of interest to some of the readers of the JOURNAL. The difficulties to which it calls attention are probably non-existent in industrial centres, where those responsible for the care of heating apparatus are likely to be better qualified for the work; but in agricultural districts the average caretaker may unwittingly be the cause of danger not only to himself but also to those around him.

The Memorandum is not written in any spirit of antagonism to those in authority, but at a time when opinions upon many subjects are undergoing change, and when economy is of supreme importance, no apology is needed for calling attention to the subject.

In spite of a special warning issued at the beginning of the recent spell of cold weather, and of printed instructions provided for the guidance of caretakers, no fewer than six cases have already been reported to me where damage to heating apparatus has resulted from well-intentioned but unskilful management, involving in most cases burst pipes and radiators.

With regard to open fire stoves, complaints of insufficient heating coupled with extravagant fuel consumption are becoming monotonous by their frequency, and in this respect I hear that our experiences in Devon are similar to those of other counties.

MEMORANDUM ON THE HEATING AND VENTILATION OF SMALL SCHOOLS.

It is generally accepted as a fact that efficient ventilation depends upon adequate movement of the air and its capacity to absorb heat rather than upon its chemical composition, and that, within limits likely to be met with in a school-room, the respiratory impurity of air is negligible in regard to ventilation.

There is almost unanimous agreement that the necessary movement of the air in school-rooms can best be obtained by means of open windows in opposite walls of a room; the lower parts of these being provided with hopper ventilators to deflect the incoming current and deliver it at a suitable height above the floor level. Some such arrangement as this is imperative if open windows are to be used continuously in winter.

This method of ventilation necessitates not only largely increased heating power, but also the even distribution of heat throughout a room. No difficulty in this respect need occur in the larger schools, where low pressure hot water heating systems under efficient management are in use; but in the smaller country schools the difficulty is becoming pronounced, and unless dealt with in the near future will be the cause of considerable expenditure. There are several alternative methods of heating such schools:—

(a) Open fires fitted with boilers to work a supplementary low or medium pressure heating scheme.

(b) Open fire stoves.

(c) Gas radiators or stoves provided with flues.

(d) Closed slow-combustion stoves.

Of the foregoing, types (a) (b) and (c) are sanctioned by the Board of Education and, in theory, are undoubtedly best suited for the purpose; but in practice difficulties occur which need careful consideration.

Dealing with these seriatim:—

Experience of supplementary heating systems (type a), already installed, points to the fact that, except in isolated instances, they are unsuitable and likely to be a source of danger from several causes.

(1) The apparatus is generally in charge of a woman who has had no previous experience of heating systems and often fails to grasp the method of working and the necessity of constant watchfulness. For this reason also the apparatus frequently becomes air locked.

(2) Where there is no gravitation water supply the cistern must be filled by hand, and although this should not often be necessary, the fact may of itself be a danger even though a water gauge is provided.

(3) If the fire is not carefully looked after the water in the system may be made to boil.

(4) The fire cannot be kept burning throughout the night, as in the case of an ordinary boiler, and the system may become frozen.

(5) The temperature is difficult to control in mild weather.

Stoves of type (b), even though several sizes in excess of the nominal heating capacity for a stated cubical area, are found to be inadequate under working conditions. The distribution of heat is defective, since it seriously inconveniences those who sit near the stove and is found to be insufficient in more distant parts of the room. The cost, moreover, is at least 150% in excess of a slow-combustion stove of equal heating capacity. Two stoves might be used, but the Board of Education would require a chimney for each, and even if stove pipes were permissible, this type of stove is often unreliable in working if such pipes are used. In many cases a "Hospital" type of open fire stove would be required if it were to be effective in heating the room, involving an outlay of from £20 to £25 for a room of moderate dimensions. Fuel consumption in open stoves is also very heavy.

Type (c) would be prohibitive in cost even if gas were available.

With regard to type (d), which is not approved by the Board of Education:—In spite of their obvious defects, and subject to certain reservations, there is no doubt that in practice close slow-combustion stoves are the most suitable means of heating the particular kind of school in question. The cost of installation is small, the stoves are economical in fuel consumption, if properly used they last well, and the distribution of heat is more even than with open fire stoves. That this statement will be regarded as heresy I am fully aware, and for that reason I recognise that any appeal to

those in authority is unlikely to receive favourable consideration; nevertheless, I am becoming increasingly doubtful whether the general condemnation of close stoves is not due more to their misuse and the neglect of ventilation than to their inherent defects.

In the Report for 1911 of the Essex School Medical Officer there is an account of a very careful series of experiments in the heating of school-rooms by closed slow-combustion stoves, undertaken to determine "whether vitiation of the air of school-rooms is caused by the formation or escape of poisonous gases as the result of the combustion of coke or coal in modern closed stoves of the slow-combustion type." Preliminary investigation proved the existence of poisonous gas—carbon monoxide—in the air of unventilated rooms heated by this means. Experiments were therefore undertaken to determine the amount of this gas, which was found to vary from a minimum of 1 part in 140,000 to a maximum of 1 part in 30,000. The amount of carbon dioxide present was also tested and found to give low readings.

The experiments were made in rooms where *ventilation was purposely reduced to a minimum*, and the top of the stove and part of the flue pipe were allowed to become red-hot. In the case where the highest readings were obtained all the joints of the flue pipe were left unsealed and the conditions intentionally made abnormal.

The conclusions drawn from the experiments were that, even under the conditions mentioned, poisonous gases were present in such small quantities as to be negligible as a cause of ill-health, and the low readings of carbon dioxide were stated to "establish the fact that the aspirating effect of the flue effectually causes the removal from the stove of the products of combustion."

The Derbyshire School Medical Officer's report for 1911 also contained the following: "As we now have ample evidence that class-rooms heated by hot-water pipes can be efficiently ventilated, there is no reason why they should not be adequately ventilated when heated by slow-combustion stoves. Properly constructed slow-combustion stoves, especially those with a descending flue, should not be altogether prohibited when there is through ventilation and under suitable circumstances."

As a connecting link between the foregoing and ventilation as now understood, one must call attention to facts established by Dr. Haldane, Dr. Leonard Hill, Dr. Rideal and others. Only a few years ago the following statement, now generally accepted, would have been received with scepticism—I quote from a paper on "The Change of Ideals for Ventilation" by Dr. Jas. Kerr, M.A., whose work in connection with London Schools is well known:—"The risk, therefore, of a child being infected with disease through the air it breathes is negligible. Infection is a directly sprayed and not an air-borne contagion. The factors, then, variations of which, as likely to be

met in school life, are of no account, are oxygen, carbon dioxide, animal toxic products, odours, micro-organisms, and, within reason, dust. In other words: *The chemical composition of the atmosphere within any likely variation of respiratory impurity does not matter and may be neglected in ventilation.*"

It would appear, therefore, that *provided a room is properly cross ventilated* harmful effects are unlikely to arise from the products of combustion of slow-combustion stoves.

There remain two points upon which I have not touched:—It has been suggested as a subject for investigation that the physical qualities of radiant heat from iron surfaces may have a depressing effect upon vitality. So far as I am aware, no information upon the point is available, but the argument might equally be applied to highly heated radiators and hot water pipes. The other point is undoubtedly important—the humidity of the air—but if it may be assumed that theories in regard to what was considered the greater evil are in process of demolition, it should not be impossible to remedy the lesser one; in fact, opinions regarding it are already in a state of flux. To quote again from the Essex report:—"No doubt some of the bad effects erroneously ascribed to the production of poisonous gases by closed stoves are really caused by an unduly dry atmosphere, *the result of insufficient ventilation.*" The italics are mine. The proper degree of relative moisture in the air essential to good ventilation is a disputed point. Dr. Parkes and Dr. Shaw have both expressed the opinion that too much stress can be laid upon it. They point out that at very high and very low temperatures it is of great importance, and it is necessary under these conditions to have dry air, but at temperatures ranging from 55° to 60° they incline to the opinion that differences of humidity are not of great consequence.

In matters of this kind principles must be established by experts, and an architect expresses an opinion with diffidence; but it is his duty to watch developments, and, if possible, to meet difficulties which occur in practice by the application of new principles when once they are established. Now, although we may not succeed in eliminating all the disadvantages which occur from the use of slow-combustion stoves, or create a standard of theoretical perfection, yet by the exercise of care may we not modify harmful effects by reducing them to limits within which they are innocuous?

In view, therefore, of the results obtained by the experiments referred to, and of changed opinion in regard to ventilation, I submit that sufficient grounds exist for further investigation; and possibly for relaxation of regulations now in force. I suggest that the following conditions should be observed if stoves of this type are used:—

- (1) That the stove be of ample capacity to obtain the desired result without the necessity of raising any part of the stove to red-heat, and that where

necessary two stoves be provided to facilitate distribution of heat.

- (2) That the stove be not provided with an inlet for the delivery of warmed air.
- (3) That the top, as well as the sides and body, of the stove be lined with fire-tiles, which must be renewed at once when defective.
- (4) That adequate provision of hopper windows be made for ventilation, where feasible, in opposite walls of the room, and that instructions be issued requiring as many as possible of these to be used whenever the School is in session.

With regard to Condition 4 it would no doubt strengthen the case if a certain number of hoppers were fixed open, but the effect would be unnecessarily to cool wall and other surfaces during the night.

The idea that the humidity of the air can be regulated by a bowl of water placed upon a stove is, I believe, no longer tenable, and I do not, therefore, suggest it as a condition.

I admit that the introduction of the personal factor is the least satisfactory part of the proposal, but I have always held that this argument can equally well be used against ventilation schemes in general.

In conclusion I may say that this Memorandum has been placed before the County Medical Officer, who approves the views it expresses.

PERCY MORRIS,

9th December 1915.

County Architect (Education).

THE RIGHT HON. ROBERT YOUNG, P.C.

The subject of the following brief memoir was born in Belfast 22nd February 1822, and passed away in the same city on 21st January 1917, having almost completed his 95th year. He was of Scots-Irish descent, as the family had emigrated to the shores of Lough Neagh early in the seventeenth century. Robert Young, c. 1650, issued his token with the legend "Robert Young dyer in Antrim." My father's father was James Young, who started in Belfast a wholesale woollen warehouse at the commencement of last century. His son Robert was born there, but his early years were mainly passed at White Abbey, where the family had full scope for out-door pastimes, and with his brothers he built boats, constructed model water wheels, and erected bridges *more suo*. His uncle, Dr. James Bryce (father of the present Viscount Bryce, O.M.), took him on his geological excursions with valuable results afterwards. At an early age he was sent to the Belfast Academy, where he received a good classical training under the Principal, Dr. R. J. Bryce, a well-known Latinist. Lord Chancellor Cairns and Sir Donald Currie were his class-mates. As the professor of mathematics at Glasgow University was an old friend of the family, my father was sent there for a year, where his fellow students were James and William Thomson (Lord Kelvin).

On his return to Belfast he was indentured to the

County Surveyor of Antrim, Sir Charles Lanyon, M.P. The fee charged was £357. Sir Charles held an exceptional position as County Surveyor, he enjoyed a good salary and his private practice extended over Ulster and afterwards throughout Ireland. Several of his pupils became well-known architects, including W. H. Lynn, R.H.A., and Sir Thomas Drew, P.R.H.A. My father became Lanyon's chief assistant soon after the completion of his apprenticeship, having previously carried out a number of important county works, principally bridges. On the starting of the Belfast and Ballymena Railway he was given charge of the section Belfast to Antrim. He was married in 1849 to the only daughter of Rev. Robert Magill, M.A., Antrim, and removed to Athlone, having been engaged as his engineer by William Dargan, contractor for the Midland Great Western Railway.

On returning to Belfast early in the 'fifties he commenced to practise as an architect and civil engineer; some years afterwards he took into partnership his pupil, John Mackenzie, J.P., the firm being known as Young & Mackenzie. In 1880 his only son Robert Magill Young became a partner in the firm.

In early years my father did some work as surveyor for London Companies, including the Salters in the county of Derry. He built a Presbyterian church at Magherafelt. He acted as surveyor for Lord Lurgan, doing some important work. A large house was built for Joseph Magill at the Cavehill, and several factories near Belfast. Like most provincial practices, that of the firm has been a varied one. Amongst their more important buildings are included a large number of Presbyterian churches, several intermediate schools, especially the Belfast Royal Academy and Watt's endowed school, Lurgan, and numerous National schools in Belfast, also many manse and church halls in Ulster; the Presbyterian Assembly Buildings and Hall, Belfast; large hospitals for Belfast Corporation and Poor Law Guardians; Insurance blocks for the Scottish Provident Institution, the Ocean Accident and Guarantee Corporation Ltd., and others; warehouses and banks. On reaching the age of ninety my father retired from active labour, but still remained chairman of the Lagan Navigation Co. and Linen Hall Library. He was created by the King a Privy Councillor in 1907.

He was a man of unceasing activity in mind and body, *mens sana in corpore sano*. In 1870, when we first travelled on the Continent, the churches of the Charente were his special study. He always rose so early that he had a water-colour sketch well in hand to show his son at breakfast. His love of Romanesque architecture led him to study the subject in various localities, and he gave the result, starting with Ravenna, in an illustrated lecture afterwards published.

He enjoyed a sketching tour through the Pyrenees, where fine examples of his favourite style were noted. Scotland was an attractive place for his holidays, as he combined sketching with geology, especially in the romantic Island of Arran. In his early life he gained

a wonderful knowledge of the ancient Irish music current in the Glens of Antrim, which he played on the violin, accompanied on the piano by my mother, who had a gift in that way. For years he assisted the Teis Ceoil as a judge of unpublished Irish arts. As a Senator of the Queen's University he did his best to encourage music. Some sixty years ago there was a remarkable merchant in Belfast called Francis McCrackin; he was a friend of Rossetti and Holman Hunt and other Pre-Raphaelites, and my father was thus introduced to their work. From this an artistic coterie sprang up of which he was a member. In addition to his art proclivities, he was an enthusiastic archaeologist, keenly interested in palæolithic man, whose former presence in Ireland he firmly maintained. He had built, like many architects, a house for himself at Rathvarna, on the outskirts of Belfast, where he delighted to play bowls with his friends. During his long life he enjoyed excellent health, although his life was refused for insurance by a local doctor of repute some 75 years ago with the remark that he would not live six months. Within a week of his end he was at work on his water-colours. A slight attack of influenza turned to pneumonia and he passed away peacefully on the 21st January, without leaving a single enemy.

ROBERT M. YOUNG [F.].

JOSEPH FOSTER WOOD [F.].

Bristol and the neighbourhood have suffered irreparable loss by the death of Joseph Foster Wood, though for some years he had not taken the full part in the work of his firm that he formerly did. Articled more than forty years ago in the office of Foster & Wood (his uncle and his father), he studied industriously, and after the death of John Foster, the head of the firm, he became partner with his father, Joseph Wood. He was elected Associate of the Institute in 1883 and Fellow in 1910. From 1910 to 1912 he was President of the Bristol Society, and for a while represented that Society on the R.I.B.A. Council.

He was a man of sterling qualities veiled beneath a modesty that never left him. Full of artistic feeling, his designs exemplified it. Possessing considerable knowledge of mechanics and other scientific subjects he was fond of applying it when dealing with constructional matters, and often successfully broke away from the usual methods. His love of beauty in detail was well known among his fellow-architects, and on almost all his works will be found the impress of his highly artistic and quite unusually delicate sense of the beauty of line and form.

As stated above, he practised for many years in partnership with his father. Of his later individual work examples are to be found both in the city of Bristol and on the countryside. Amongst many others the interesting front of some large business premises on the south side of Mary-le-Port Street was designed by him, and the *Times* and *Mirror* offices in

St. Stephen Street afford a picturesque example of his work in dealing with timber construction combined with brick and stone. A charming memorial tower at Churchill, Somerset, is a good specimen of his originality, while several houses in the country testify to his careful consideration of the picturesque combined with utility and convenience. In his early days he had assisted the partners of his firm in the preparation of drawings of many important buildings in the city of Bristol and in other places which stand to their name. For over 60 years the firm of Foster & Wood has practised at the same offices which are still in use, and for more than 50 years before that long period the firm was in existence and was located almost within a stone's throw of the same spot. It was in the year 1905 that Joseph Wood, the well-known father of Joseph Foster Wood, died, after an extremely busy life as an architect, leaving his son, who has now himself passed away, the sole representative of this long-established line of professional men. There followed shortly afterwards an arrangement with Graham Awdry, a former pupil of the firm and assistant in their office, but then practising at Westminster, by which he became a partner, and for some ten or eleven years the two worked together, renewing and increasing the friendship begun in the days of their pupilage. But some feeling of waning health and bodily power was beginning to make itself manifest, and Joseph Foster Wood gradually and reluctantly withdrew from an active part in the practice, only retaining in his own hands certain special work prepared and developed chiefly at his private residence.

His passion for botany and horticulture had now a chance of being indulged, but the outbreak of war upset many fair schemes. He felt, as the great conflict went on, that he must do more and more to help the sufferers, and for many months before his last illness he worked zealously at a depot, making crutches for the wounded soldiers.

Those who knew him best will not easily forget his truly lovable personality and his singleness of heart. His smile of greeting was one of the brightest imaginable; the grip of his hand one of the truest and most characteristic expressions of his deep feeling. He was sensitive to a degree, and so unselfishly modest of his own opinion when engaged in a friendly conversation on whatever subject, that if the other, carried away by eagerness, broke in upon his deeply thought-out and invariably wise remarks, uttered always with deliberation, he would stop in a moment, like the closing of a sensitive flower, but without any sign of annoyance, and await the other's pleasure before continuing. He had, indeed, a truly wonderful self-command that never seemed to fail him. Weakened to some extent by an attack of influenza about Christmas time, he caught a chill, and, after a few days of pneumonia, he passed on to the Greater Future, leaving many sad hearts to mourn his loss, but to remember ever the charm of his friendship and the influence of his fine character and noble example.

G. C. A.



9 CONDUIT STREET, LONDON, W., 17th March 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-first List.

Fallen in the War.

ADAMS, Private HENRY EUSTACE [Student], Rifle Brigade, attached to the Royal Engineers. Died of wounds at the base hospital in France on 25th October last, aged thirty-eight.

Mr. H. E. Adams, the younger son of the late Mr. Robert Adams and a member of the well-known firm of inventors and engineers, was educated at the City of London School and London University, and served his articles with the late Mr. H. H. Collins [F.] and Mr. M. E. Collins [F.]. He passed the Intermediate Examination and was admitted Student R.I.B.A., but subsequently entered his father's business.

JAMES, Second Lieut. DONALD CROFT, Gloucester Regt., only son of Mr. Richard C. James [F.], of Bristol, aged nineteen.

STATHAM, Lieut. NOEL HORNER, East Surrey Regiment, attached Devons, third son of Mr. H. Heathcote Statham [F.], aged twenty-four.

Award for Gallantry in the Field.

TUBBS, Second Lieut. CECIL BURNELL, Som. L.I. (son of Mr. Percy B. Tubbs [F.]), awarded the Military Cross in recognition of his gallantry and devotion to duty in the field. The *London Gazette* of 3rd March says: "When sent forward to take command of a company he crossed the open many times under heavy fire, going from platoon to platoon explaining the situation. He set a splendid example throughout."

Appointments, Promotions, &c.

Mr. W. H. Ward, jun. [Licentiate], has been serving since the outbreak of war in the Royal Field Artillery, and has attained the rank of Major.

Mr. Douglas Wood [A.] has been appointed Deputy Assistant Director of Labour, France, with rank of Staff Captain.

Mr. Harold Harlock [A.] has been promoted Lieutenant R.N.V.R.

Major E. Bertram Kirby [Licentiate], son of Mr. Edmund Kirby [F.], who has been at the Front in command of a battery of artillery attached to a Canadian division, has been invalided home, and is now employed at headquarters at the Horse Guards for Home Defence.

Mr. Charles Lovett Gill [F.], of the firm of Messrs. Richardson & Gill, has been granted a commission in the King's Liverpool Regiment.

Architects and National Service: Deputation to Mr. Neville Chamberlain.

Under the auspices of the R.I.B.A. and the Architects' War Committee a deputation representing the architectural profession in the United Kingdom waited upon Mr. Neville Chamberlain, Director-General of National Service, on Wednesday, 21st February, to urge in connection with the National Service scheme the utilisation of architects by the State for the special kind of work for which their training has fitted them.

The following is a list of architects nominated to serve on the deputation, and most of them were present:—

Mr. Ernest Newton, A.R.A., President R.I.B.A., Chairman of the Architects' War Committee; Sir Aston Webb, K.C.V.O., C.B., R.A. [F.], Past President R.I.B.A.; Sir John Burnet, R.S.A., LL.D., Vice-President R.I.B.A.; Sir Ernest George, A.R.A. [F.], Past President R.I.B.A.; Mr. Reginald Blomfield, R.A. [F.], Past President R.I.B.A.; Mr. Paul Waterhouse [F.], Vice-President R.I.B.A.; Mr. H. V. Lanchester [F.], Vice-President R.I.B.A.; Mr. E. Guy Dawber [F.], Hon. Secretary R.I.B.A.; Mr. John B. Gass [F.], President of the Manchester Society of Architects; Mr. W. Alexander Harvey, President of the Birmingham Architectural Association; Mr. A. B. Burleigh, President of the York and East Yorkshire Architectural Society; Mr. Adam F. Watson [F.], President of the Sheffield, South Yorkshire and District Society of Architects and Surveyors; Mr. Lennox Robertson [F.], President of the South Wales Institute of Architects; Mr. T. Forbes MacLennan [A.], President of the Edinburgh Architectural Association; Mr. Harbourn MacLennan, President of the Aberdeen Society of Architects; Sir Frank W. Wills [F.], President of the Bristol Society of Architects; Mr. W. Kaye Parry [F.], President of the Royal Institute of the Architects of Ireland; Mr. James Findlay, President of the Dundee Institute of Architects; Mr. Charles Cheverton, President of the Devon and Exeter Architectural Society; Mr. John Watson [F.], President of the Glasgow Institute of Architects; Mr. G. Frederick Bowman, President of the Leeds and West Yorkshire Architectural Society; Mr. J. Woodhouse Simpson, President of the Leicester and Leicestershire Society of Architects; Mr. E. Percy Hinde [F.], President of the Liverpool Architectural Society; Captain R. Burns-Dick [F.], President of the Northern Architectural Association; Mr. J. Alfred Gotch, F.S.A. [F.], Vice-President R.I.B.A., President of the Northamptonshire Association of Architects; Mr. H. Gill, President of the Nottingham and Derby Architectural Society; Sir William W. Portal, Bart. [Hon. A.], President of the Hampshire and Isle of Wight Association of Architects; Mr. A. G. R. Mackenzie [F.], President of the Architectural Association; Mr. A. Alban H. Scott, Vice-President of the Society of Architects; Mr. Edwin J. Sadgrove [F.], President of the Society of Architects; Mr. Percy B. Tubbs [F.], Past President of the Society of Architects; Mr. Basil Champneys, Mr. W. H. Cowlshaw, Mr. F. J. Wills; Mr. H. Martineau Fletcher [F.], Vice-President of the Architectural Association; Mr. Alan E. Munby [F.], Hon. Secretary of the Executive Architects' War Committee.

Mr. ERNEST NEWTON, A.R.A., in introducing the deputation said: The deputation which I, as President of the Royal Institute of British Architects, have the honour of introducing is representative of the whole profession of architecture throughout Great Britain. Our object in coming here is twofold: First, to indicate briefly the services we believe we can render to the State; and secondly, to offer these services and the whole machinery of our organisation in order to render them readily and easily available. Other speakers will go more into detail in regard to the specific services which architects can render, but I should like as a preface to make clear—what

is not, I think, generally understood—that the profession of architecture is essentially practical, and, although individually we may specialise more or less, collectively our work includes everything directly, and even remotely, connected with building. We are accustomed to surveying, estimating, assessing damage, and to the supervision of works of all kinds. We are familiar also with the construction of large and complicated factories of every description, as well as of public buildings and houses. As men of affairs and judgment we have to see that all these buildings are put up with a proper regard to economy in cost and arrangement. At a time such as the present, when our knowledge and experience should have been of the greatest value to the State, and would have saved delay, mistakes, and much waste of money, we have, as an organisation, been made no use of. It is now late in the day, but believing that in organising the man-power of the country it is more practical and economical to put men to work, so far as possible, which their training and experience enables them to do, we have asked you to receive this deputation, which offers you this skill and experience to make the best use of what may be possible in your scheme of organisation. I am also asked to say that we shall be glad to submit a practical scheme for your consideration or to assist in any way you may indicate.

Mr. REGINALD BLOMFIELD, R.A., Past President R.I.B.A., said: Sir, as Mr. Newton has said, we are here to place ourselves entirely at your disposal in the way you think best. We think we can help you to some extent in calling your attention to some qualifications possessed by architects which have been greatly overlooked in the past. Soon after the war broke out, the Royal Institute of British Architects offered its services to the Government of that time and the Government failed to realise what the capacities of architects were. They turned the cold shoulder on them; and, in consequence, the country lost the services of a very capable, trained body of men. The qualifications to which I venture to call your attention—and I shall only put the matter quite generally—appear to me to be these: In the first place, architects are trained designers and constructors in all forms of building; they have to keep in touch with every sort of material and to know the new materials which come along, and they are, of course, familiar with the ones of which they have already had experience. They have to deal with every sort of building, from a pig-sty to a palace, and they have to deal, in the conduct of their work, with all sorts of unforeseen emergencies which may occur in the course of building operations and which must be dealt with then and there. Architects cannot wait about and let things drift or leave it to the builder; the architect is the man who is responsible, who has to take upon himself the responsibility of settling these things as they occur. And we venture to suggest that architects have more varied experience in building matters than have engineers, who are, often, specialised men. We have often to deal with rough-and-ready situations.

Mr. NEVILLE CHAMBERLAIN: I do not know that I quite understand the particular point to which this criticism is directed. It is only for my own information, I am not criticising your remarks. I understand you to say that the services of the Architects' Institute were offered to the Government and that they were not availed of as they might have been. Do you mean by that that the buildings which were erected were not erected with the aid of architects?

Mr. BLOMFIELD: No. I am talking about the general

services which might have been rendered by architects in all sorts of situations. My remarks were calling your attention to the fact that we think the training which architects receive enables them to deal with all sorts of varied situations. One of the most essential qualities of architects is resourcefulness in dealing with matters rapidly. Then there is the question of draughtsmanship. Architects are not only trained designers and draughtsmen on their own, but they are able to make drawings for others, and to see that drawings are properly carried out. Those who cannot do this would be useless in supervising work which has to be carried out to drawings. To know one's way about in drawings requires special knowledge and training, and that the architect possesses in a very high degree. And the third point I suggest to you, Sir, is: There is a prevailing idea that architects are merely artists. That is quite wrong: they are that and a good deal more. Half of our time and training and work is devoted to the organisation, the administration and control of manual and mechanical labour. During the last eighteen months or two years I have been engaged in superintending and taking part in a good deal of trench work round about London, and I find that in these trench systems, in addition to the position officer, there were civil engineers in charge of the works, who were drawing salaries, and later on their salaries were commuted and they were given commissions. I do not say they were not competent to do their work, but I think the architects were as competent, and in some ways more competent, because they are more used to rough-and-tumble work such as we sometimes have to deal with. This is an instance of the sort of service architects might have been called on to render. I shall not detain you further, Sir, with the remarks I have to make, except to say that we architects are, at this moment, precluded from the practice of our calling, but, as patriotic men, we cheerfully acquiesce in that, because we believe it to be for the best interests of the country. We are therefore in the position of having a good deal of enforced leisure, which enables us to place our services at your disposal in whatever way you may think best adapted to the interests of the country.

Mr. JOHN B. GASS: Sir, as President of the Manchester Society of Architects, I have the honour to specially represent on this deputation the 19 Architectural Societies of Great Britain and Ireland allied with the Royal Institute of British Architects and embracing the whole of the country. There are also 20 Allied Societies in the Overseas Dominions. I am supported on this deputation not only by the President and Past-Presidents of the R.I.B.A., but by the Presidents of the Allied Societies from all parts of England, from Wales and from Scotland, together with the Presidents of the Society of Architects and the Architectural Association—a deputation the most representative and important ever known in the profession of architecture. In the Manchester Society's area, and generally in the provinces, members practise as architects and surveyors, developing the practical as well as the artistic side of the profession. Many are specialists in factory and workshop design and construction. The training and experience of architects enable them to arrange and design buildings in the best way for their effective use, construct them scientifically and give them suitable architectural character. As you know, Sir, the universities and municipalities in the great industrial centres, including Birmingham, have all comprehensive courses in architecture. The examinations for membership of the Royal Institute of British Architects lay great stress on planning, scientific

construction, materials, sanitation, and general practical equipment for work, as well as on artistic ability, and modern practice makes the same demands on all architects. I mention these things, Sir, to emphasise the fact that this specialised training, with practical experience of affairs, has brought forward a race of highly trained and practical as well as artistically minded men who practise in the various parts of our country. Their services for the commonwealth would have been of great practical and economic value if properly utilised. They were never so utilised, though their services were urgently required from the beginning of the war and are required now. Architects form an organised profession. Through the President of the Institute all their specialised services were placed at the disposal of the State in September 1914, when it was seen that those services were urgently required in the national interest. As an organisation they were never called upon to help in building in any way or to advise or suggest. Their services were, however, requisitioned when it was found necessary to stop building, and this stoppage was in part owing to the bad arrangements previously made for dealing with essential national building works. The Allied Societies were ignored altogether, though they could have been of great service in the various districts. As a whole organisation, Sir, it has been stated that we were unknown to the authorities—the only official requests for services were as unskilled labourers, as barges, or in connection with charitable work. The architectural profession, as the directors of the scientific and technical side of building construction and requirements, is the recognised professional director of the building trade. Owing to their not being called upon the whole of the general organisation of the building trade of the country was not utilised for the many national building works requisite in all parts, with consequent unsatisfactory arrangement, delay in completion, inefficiency and waste. The organisations of practically all other of the necessary trades—iron, leather, chemicals, and others—were utilised to great advantage in the public service. The Allied Societies put forward the following suggestions for your consideration:—

That an Architectural Advisory Committee, with representatives in the Allied Societies' Districts, might be appointed.

The Architects' War Committee, with the Allied Societies, will undertake to further extend their register, classify and recommend for employment experienced architects for control of national building operations and buildings; these to be appointed to positions as required through the Advisory Committee and, as far as possible, in their home districts.

When advantage would accrue to the State, special arrangements might be made with architects to undertake part-time duties in the districts in which they practise.

The special training and experience of architects enable them to undertake all duties in connection with all classes of buildings and the various works connected therewith, as well as inspection work dependent on the carrying out of drawings and specifications.

When demobilisation occurs this organisation will be available to assist architects on active service in returning to professional work in civil life.

Sir, we, the elder men of our important profession, appreciate the value the national organisation you have undertaken may be to the State. In the public interests we feel very strongly that in your organisation for National Service there should be a definite place and a recognition of the value to the nation of the training and specialised experience of the members of the architectural profession, and they should not be dealt with in the exceedingly unsatisfactory way heretofore adopted.

Sir ASTON WEBB, K.C.V.O., C.B., R.A.: I ask you, Sir, to feel that we are here recognising the enormous responsibility and difficulty of your office, and that our desire is to assist, if we can, in one branch of occupation in this country by explaining to you how we would wish to place our services at your disposal. We would like to say—as I think has already been said, and I might say it once again—that we hope that when you come to allot the work that it may be possible to allot to architects work which their previous training will have qualified them to undertake. At the same time I think I am speaking for the whole of our profession in saying that we unreservedly place our services entirely in your hands in the way you think they can best be employed for the needs of the country. But we think men who have been trained as we have been would be more suitably and more usefully occupied in similar work to that which they have been accustomed to than in being put to some outdoor occupation which probably they would be very incapable of satisfactorily carrying out. I have heard of gentlemen high up in my profession offering their services at the War Office, for instance, and being referred to the Labour Bureau, as being the proper place for them to apply. That may be right, or it may be wrong, but I must say that it has hurt them, and it does not encourage voluntary help for their work to be referred to a Department—which may be the right one—but which does not strike us as being quite the one which we should have expected to be sent to. I might also say—although I am aware you know a great deal about architects and architecture, and it may seem almost impertinent in me to explain to you—that we are accustomed to undertake work of all sorts, from town-planning down to cottage building, and with all the intermediate work with which some or other of us are very intimately acquainted. A friend of mine who is engaged in Government munition work called on me the other day and said—not at all with reference to this deputation: he knew nothing of it—"I cannot understand why it is the Government do not employ architects more than they do in my work." I said "What do you mean?" He said, "In the work which comes before me there are all sorts of things which have to be examined and passed, such as large cases for munitions, shell cases which are made of teak and have to be made of the exact size to fit the shells, gun carriages, wheels, and the hundred-and-one things required that have to be put together in a certain way. We constantly find they are not the right size and are not put together in the right way, so that when they are put down on a platform, for instance, they fall to pieces. These are not exactly architectural things," he said, "but they are things which an architect is just the man to examine and pass. We want men who can understand a drawing when it is put before them and can take a drawing and a specification in their hands and see what is being delivered and see whether they are in accordance with the drawings and specification or not, and, if not, where they are wrong." It is a very simple thing, but the man, whoever he may be, who has to pass these things ought to have the training which architects have and which enables them to carry out that duty. I only mention this as one of many ways in which we could help apart from actual building work. One other point I would mention is that, although, as Mr. Blomfield said, our work has been compulsorily stopped—very properly, no doubt—we think that while our proper work has been stopped our ability to fall in with national work has been overlooked. It was stated in Parliament that engineers were wanted, rather than architects. That was a point

which we all felt very much at the time because we know that we are perfectly able, and more fitted, for a great deal of this work which is carried on in this country by the Engineers. I have no quarrel with engineers—both my sons were Royal Engineers, and I am not likely, therefore, to say anything against the Royal Engineers. But I say there is much work in this country going on which we should be better qualified to undertake than is a Royal Engineer. A great many mistakes have been made, we all know—it is common knowledge, though I should be the last to say that if architects had been employed there would have been no mistakes. Still, many of these mistakes would have been less likely to occur had those with our special training been employed. We do not profess to be cleverer than anybody else: all we profess is to have had a special training which has given us facility in one particular branch, and we hope very much that we may have the opportunity of exercising it. Our sense of responsibility has been mentioned. People say to us "Here is a certain amount of money. Please to carry this out for us for the sum which you say it should cost." There, again, the military engineer has not been accustomed to the same sense of responsibility: he has someone over him, and someone over him again, and again he has someone over him. We are accustomed to carry out work on our own initiative, which, I venture to think, is a most useful and desirable qualification, especially for work which is being done in a hurry, as this necessarily must be. These are a few of the reasons for which we have ventured to trouble you and take up your time by expressing the hope that we may find occupation on the lines in which we have been educated and brought up. And it is our desire to place the whole of our ability, skill and service at your disposal, and also the organisation of our societies, if you will be good enough to make use of them.

Mr. NEVILLE CHAMBERLAIN, in reply, said: Mr. President and gentlemen, I have listened with very much interest and a great deal of sympathy to the representations which have been made to me upon your behalf. It has long been in my mind that certain professions, including architects, were not being made as much use of as they might be, and I am anxious to do what I can, in this new Department which has been set up for dealing with, not manual labour only, but with man-power, whether manual or non-manual, of the country as a whole. I am anxious, so far as I can, in this new Department, to set up some organisation which will enable us to utilise, for the advantage of the country, special training and special aptitudes, such as those possessed by architects. My own business life has brought me into contact with architects to a considerable extent and, of course, I very well understand what their capabilities are. Now, with regard to the past, I do not think it is necessary for me to put up any defence of Government Departments with which, in the past, I have had nothing to do. I will only say I am sure you all have realised that when you enter upon such an entirely novel set of conditions as those which obtain in a great war like this, it is very difficult for a Department to change its whole attitude of mind and to adapt itself with the rapidity which we should like to such new problems as arise, and that if things have been slow, as they have been in many ways, I am quite certain that it is a state of affairs which is common to every single Government which is engaged in the war, whichever side they are fighting on. But now, perhaps, the time has come, although it may be late in the day, when it is possible to make some improvement, and

when that improvement, although late, may not be too late still to be of service. Of course, the difficulty is to find the holes into which to put the various pegs. I have got heaps of people who want jobs, but I have not got enough jobs for the people. And I think that really the most practical way of meeting the desires which you have expressed this morning would be for you to set up some sort of Advisory Committee, as was suggested by Mr. Gass, which could keep in touch with me, and which could suggest to me, from time to time, ways in which the services of architects might be utilised. I was rather struck with the suggestion which was made by Sir Aston Webb that architects may be used as inspectors. If they were willing to give their services in such positions as that I am bound to say that seems to me a very practical and excellent suggestion. I am not at all sure that we are not over-inspected nowadays: there are certainly vast armies of inspectors engaged in testing and passing materials required for one purpose or another, and I am not quite certain that they are all as necessary as they might have been in peace time. But I am sure that a good many of them have got special training which would enable them to do something else of particular value to the country. That is a suggestion I shall certainly bear in mind, and it is one of which I hope to make some use. Now, I want to tell you that I am endeavouring to make special provision for men of the professional classes. The scheme which I have put forward for National Volunteers has been criticised in some quarters on the ground that it was evidently not designed for men of the professional classes. Well, I would defy anybody to draw up a form of offer of service which would be equally applicable to every class in the country, and, of course, there are a far larger number of people required for manual labour than for administrative, clerical, or professional work; but the subject has not been lost sight of, and I have got an arrangement made under which offers of service, filled up by men who, on the face of their card, belong to those classes, would be sorted out from the others and dealt with in a different manner. Instead of going back, as the card does, to the local Employment Exchange, it will go to the Divisional Office—that is to say, the Headquarters, a higher office. There there would be a special officer appointed, qualified to deal with this particular class of men, for the purpose of conducting the personal examination which is necessary in order to be quite certain that we have got the volunteers properly classified before we attempt to use them. A man very often does not know, or, at any rate, does not give a correct account of, his qualifications from our point of view. There must be some personal contact, and that is of advantage to the man, because it enables him to say by word of mouth a great deal more than he would write on paper. We shall have a special officer, in a special place, to deal with these professional classes, and, having got them classified and sorted, we shall take special measures to offer their services, to make it known to Government Departments and to private firms who may have vacancies for administrators, or clerks, or other professional men of one kind or another, that we have a body of such people whose services we are able to put at their disposal. I hope in that way—although one is never free from the possibility of mistakes—we shall be able to utilise the services of these people in the particular avocations for which they are best fitted. I would suggest to you that if your members who feel that they are able to do so—and I hope they will all feel that they are able to do so—will fill up our offer of service cards,

they will be treated in that way. They need not be afraid they will be sent to dig potatoes, or put to work of that sort: we are not out to waste labour in that way, whether it be manual or non-manual: we want to make the best use of everything, and we are going to try our best to classify our volunteers properly. You will help me very much if you will form this Council, and put before me, from time to time, such information as comes to you about work which you think you might be utilised for, and for which the services of architects are not now being utilised. I think perhaps the best plan will be for me just to turn over these things, and I might correspond with your representative, the President, upon the subject. I did not know exactly what it was we were going to discuss this morning, so I am not prepared to make a definite suggestion; but I will correspond with him, with the view to carrying out something on those lines, and I hope that in that way I shall be able to meet the wishes which you have expressed, and which, I recognise, have been prompted entirely by patriotic motives.

Mr. NEWTON: On behalf of the deputation I thank you very warmly for your cordial reception and for the very hopeful way in which you have foreshadowed your way of dealing with our difficulties. I need not say that, personally, I shall be only too glad to devote as much time as is left to me to offer any suggestions to you, and at the same time it would be of very great value if suggestions of possible employment might come from you to me.

Mr. NEVILLE CHAMBERLAIN: We will make it reciprocal.

Architects' War Committee and National Service.

An outcome of the deputation to Mr. Neville Chamberlain is the formation by the Architects' War Committee of an Advisory Council to confer with Mr. Chamberlain from time to time and suggest the best means for the employment of architects under the National Service Scheme. The Advisory Council consists of the following members:—

Mr. Ernest Newton, A.R.A., President R.I.B.A., Sir Aston Webb, K.C.V.O., C.B., R.A. [F.], Mr. Reginald Blomfield, R.A. [F.], Mr. H. V. Lanchester [F.], Mr. A. R. Jemmett [F.], the foregoing five members representing the R.I.B.A.; one representative of the following Allied Societies: the Birmingham Architectural Association, the South Wales Institute of Architects, the Manchester Society of Architects, the Liverpool Architectural Society, the Northern Architectural Association, the Leeds and West Yorkshire Architectural Society, the Sheffield, South Yorkshire and District Society of Architects and Surveyors; Sir John Burnet, R.S.A., LL.D. [F.], representing the architectural profession in Scotland, one representative each of the Society of Architects and the Architectural Association; Mr. Basil Champneys as representing unattached architects; and Mr. A. E. Munby [F.], Hon. Secretary. The Council have been given power to co-opt five additional members and, so far, Mr. Thos. E. Colcutt [F.] and Mr. H. D. Searles Wood [F.] have been co-opted.

The Advisory Council has the status of a sub-Committee of the Executive War Committee, and has power to act and to report from time to time to the principal Committee. Sir Aston Webb is Chairman.

A statement has been drawn up by the Advisory Council and issued for publication in the Professional and Daily Press and in provincial centres, advising architects to sign the National Service form and to send it in duplicate to the nearest Allied Society, or to the R.I.B.A. in the case of practitioners in London and the Home Districts. This statement is printed under "Notices" on page 128 of the present issue.

Charing Cross Bridge.

The South-Eastern and Chatham Railway Bill, the object of which is practically the reconstruction of Charing Cross Bridge, was read a second time in the House of Commons on the 13th inst.

The Royal Institute and the London Society had lodged a Joint Petition against the Bill, praying to be heard by counsel, &c., and the same arguments were adduced as in last year's Petition [JOURNAL, 24th June 1916, p. 279]. It further submitted that there was no urgency for the Bill to become law this Session. The work of altering and strengthening the Bridge would take seven years to complete, and the Petition pointed out that neither material nor labour would be available until after the war. It was also submitted that the reasons put forward for altering and strengthening the bridge no longer held good, for not only were the company unable to increase the number of trains running over the bridge, but they were actually running fewer. As Charing Cross Station was exclusively used for passenger traffic, the bridge was more than adequate for the restricted traffic now run over it. It was further submitted that while those interested in the improvement and development of London, and especially the district in the neighbourhood of Charing Cross Station and the opposite side of the river, were not relaxing their efforts to secure improvements, including the removal of the station to the south side and the substitution of a road bridge for the railway bridge, it was not possible at the present time for any of these schemes to materialise. Improvement schemes could only be promoted by the authorities having powers of raising money, and this could not be done until after the war. The company therefore should not be allowed to take advantage of present conditions and have the powers they sought granted to them this Session. In conclusion, the Petition urged the refusal of these powers and asked that time might be given for the petitioners to endeavour to secure that the proper authorities should take steps to effect the objects the petitioners had in view.

Sir WALTER ESSEX, in moving the rejection of the measure, expressed regret that there was no co-ordinating authority to deal with matters affecting the well-being of London, the Empire City, to review questions affecting its amenities, and to resist the invasion of its rights and privileges. The County Council might spend two millions on a magnificent county palace on the south side of the river, and from its windows have to look on this abortion of a bridge. The Bill would add to the abomination already caused by the use of the bridge as a lay-by for locomotives. The company's proposals were less for the necessary strengthening of the bridge than for a considerable enlargement of its traffic conveniences. The South-Eastern Railway had six great termini exclusive of Charing Cross, to which station only one-fifth of the passengers which the company carried to London were brought. Between 1902 and 1912 the number of passengers had decreased by twenty millions. He asked the House to refuse the Bill. For fifty years the railway had been a blight on Kent. It was ill-planned, ill-equipped, and ill-managed.

Mr. JOYNSON-HICKS, in supporting the Bill, said the Company were prepared to insert a clause providing that if the station and bridge were acquired within ten years for the improvement of London by any public body, there should be deducted from the compensation fund due to the Company the sum that they now proposed to spend on the strengthening of the bridge.

Mr. JOHN BURNS said that from the railway point of view the bridge and station occupied too small an area for the trade it had to do, it was incapable of expansion,

and was in many ways inconvenient. No strengthening of the bridge would get over those objections; the only satisfactory course was to have the terminus on the Surrey side of the river. London had made up its mind to have Charing Cross Bridge removed.

On a division, the second reading was carried by 184 votes to 56.

Architects and Fire Insurance.

At a meeting of the Insurance Institute of London, held at the Gresham College Hall on the 19th ult., a lecture was delivered by Sir Aston Webb on "Fire Insurance in Relation to Buildings and their Architecture."

Mr. T. M. E. ARMSTRONG, President of the Insurance Institute, in introducing the lecturer, referred to the enormous waste every year by fire, and advocated the pooling of the experiences of architects and of insurance offices in order to reduce the waste. The work of the architect and that of insurance offices were so intimately related, he said, that one would imagine that the R.I.B.A. and the Insurance Institute would have found it advisable to have a joint committee almost always on session, both parties having everything to gain and nothing to lose by being more closely associated. The architect by falling in with the insurance office regulations and studying their rating rules had it in his power to effect very handsome reductions in the premiums which his client would have to pay; and the insurance offices, by inducing the architect to erect buildings as far as possible fireproof, would save themselves a great many losses.

Sir ASTON WEBB, in his lecture, remarked on the extent to which the design and arrangement of buildings had been influenced by the restrictions, requirements and laws in relation to fire. The aspect of London had been entirely altered in the seventeenth century through the substitution of bricks for the picturesque wood which was the mode before the Great Fire. Again, in the present day, the use of fire-resisting materials, such as concrete, had greatly affected the interior appearance and architecture of buildings. The building regulations, though sometimes irritating, had been on the whole beneficial both to architecture and building, and had resulted in a sounder and more substantial method of building, which in itself was a gain. Such regulations could only be general; if made too stringent, great and almost intolerable hardships would be entailed on a large class of speculative building which the community required. Though in theory it would be desirable that all buildings should be of fire-resisting construction, it would in the case of small domestic buildings so raise the cost of construction as to make their erection at reasonable rentals impracticable. Quoting the figure of £10,000,000 as representing the annual loss in this country by fire, Sir Aston said he firmly believed that this could be largely reduced and that the insurance companies would be found willing to assist in attaining this end. The present 1s. 6d. insurance policy only required that a building should be built externally of brick or stone and roofed with slate or tiles. But the large majority of fires originate in interiors, and matters of first importance are the materials with which roofs are constructed and covered, the construction of floors, ceilings, and wall-coverings, also the construction of hearths, flues, fireplaces, etc. Is it possible, Sir Aston asked, to encourage fire-resisting construction to a larger extent than is done at present? One difficulty is cost; a fire-resisting building is more costly to build, though with the more general use of fire-resisting materials the difference will no doubt rapidly decline. Concrete,

asbestos, and other non-inflammable slabs, have in the last few months been largely employed in huts for walls and partitions, and with the present scarcity of timber are found cheaper and better. But though self-interest, professional advice, demonstration and research have done something, everything possible for the prevention of fires has not yet been done. One further inducement could be held out to the public to induce them to provide all possible protection to their buildings. The Fire Offices, he understood, offered special inducements in the way of reduced premiums to the owners of buildings which are erected on fire-resisting principles and also for buildings protected by extinctive appliances, fire alarms, etc.* If this was correct it seemed to offer the very inducement required, but the advantages offered needed to be more generally known and understood and made available before the building was erected. The rules of the Fire Offices' Committee had a standard of fire-resisting construction applicable to all buildings except for a further standard for various types of mills. These rules followed generally the London Building Act requirements and appeared perfectly reasonable, but what advantages were given to buildings that came up to standard he was not clear, neither were others of his profession of whom he had made inquiries. Perhaps the Fire Offices' Committee could take architects more into their confidence, so that they could know to some extent what their requirements were to secure those rebates while their plans were in course of preparation. Insurance would then have its due influence on buildings and their architecture, for fire-resisting materials do undoubtedly make for good building. Buildings so constructed would be sounder and more durable, more cleanly and therefore healthier, and as there was nothing that influenced the design of buildings more than material, with new materials we should have new forms of construction and new problems solved in an up-to-date spirit.

Mr. ARMSTRONG, speaking at the conclusion of the lecture, remarked that the mere fact that an architect of Sir Aston Webb's eminence appeared not to be fully acquainted with the rules and regulations of the Fire Offices' Committee was very strong evidence that the Committee might do a great deal more to promulgate their rules and special discounts among architects.

Mr. O. MORGAN OWEN, in proposing a vote of thanks to Sir Aston, said that they were personally sorry that Sir Aston Webb had not known more about what the Fire Offices were doing. They had their standards of fire-resisting construction—five classes altogether—for which they offered a certain reduction according to the class. They made no secret of the reduction, and they would be delighted to acquaint the R.I.B.A. with full information on the point.

Mr. J. ROBERTSON, in seconding the vote of thanks, said he was sorry that the relations of the Fire Offices' Committee and the R.I.B.A. had not been as close as they might have been in the past, but he had no doubt they would be much closer in the future and was sure that by the two parties laying their heads together much good might be done.

Sir ASTON WEBB, in replying, expressed his thanks for what had been said as to keeping the R.I.B.A. informed of the various matters he had referred to. He would have

* Sir Aston here quoted the following statement from one of the Fire Offices' Committee's printed papers: "The amounts of the rebates are not made public but are issued confidentially to the various offices by the Committee."

pleasure in conveying that intimation, and he assured the Insurance Institute that the R.I.B.A. would be pleased to see their President more frequently so that they could exchange views. He did not suppose that architects were blameless in these matters; but he had a sort of idea that the insurance companies kept this question of rebate rather in reserve. They all knew that the companies increased their premiums, but he thought it was rather a secret that they sometimes reduced them.

[Since the lecture Mr. W. Crichton Slagg, Chairman of the Fire Offices' Committee, has kindly sent to the Institute copies of the Rules of the Fire Offices' Committee for Standard Fire-Resisting Construction. These describe the type of construction to which buildings must conform in order to earn the reduced premium, and rules are included as to ferro-concrete or reinforced concrete construction. Mr. Slagg mentions that it would be impossible to give full information as to the discounts allowed for buildings conforming to the Standards, varying as they do for different classes of risks, but he states that the allowance for risks of Standards Ia and Ib construction runs from 35 to 50 per cent., while compliance with Standards II, III, and IV would entitle the buildings to correspondingly lower discounts.—Ed.]

Registration of Business Names Act, 1916.

The Council desire to call the attention of Members and Licentiates to the above Act, which applies to professions as well as to trades or businesses. In any case of doubt it would be advisable to write to the Registrar or consult a solicitor. The following is a short note of some of the provisions of the Act, which may be found to apply to practising architects:—

1. Every person or firm carrying on business for profit in the United Kingdom, under a business name not consisting of his true surname or the true surnames of all partners, without any additions other than Christian names or initials, must register under the Act.

The addition of the words "and Sons" or "Brothers" or "& Co." appears to render registration necessary, but where two or more individual partners have the same surname the addition of an "s" at the end of a surname does not of itself appear to render registration necessary.

2. Registration must be effected between 22nd February and 22nd March 1917, and after that date all business letters, etc., of persons or firms required to be registered, must have mentioned, in legible characters, the true surname and initials of all persons or partners in the firm.

3. Any change in the name of a person or firm must be registered within fourteen days, and also if any person or a partner in a registered firm changes his residence.

4. There is a penalty of £5 a day for non-compliance with the Act, and this penalty applies to every individual or member of a firm, and there are other heavy penalties as to defaulters, recovery of debts, wrong statements, etc.

5. Registration forms may be obtained (*gratis*) after 21st February 1917 at any Post Office. The registration fee is 5s., stamp on form.

6. All communications should be addressed to "The Registrar of Business Names," 39 Russell Square, W.C.

Victoria and Albert Museum: Exhibition of Furniture.

The war having temporarily claimed the London residences of the Duke of Buccleuch, the Duke of Devonshire and the Duke of Westminster, the valuable collections of furniture which they contained have been deposited by their owners on loan in the Victoria and Albert Museum, and the public is thereby indebted to them for a highly important and interesting exhibition.

The principal collection is that lent by the Duke of Buccleuch from Montagu House. It consists, for the most part, of French furniture belonging to the period of Louis XIV. to XVI., and includes a remarkable series of Boulle examples; pieces signed by Carlin and Joseph; chairs and screens covered with Beauvais and Gobelins tapestry; and many other valuable specimens.

The collection lent by the Duke of Devonshire from Devonshire House consists almost entirely of furniture designed by William Kent, the architect of that house when it was re-built in 1734 after a fire in the preceding year. It includes about twenty typical examples of Kent's work, and thus will afford to students a unique opportunity of studying the characteristic style of this important artist.

Among the pieces lent by the Duke of Westminster from Grosvenor House, the most striking are a pair of Boulle armoires, similar to the well-known examples in the Wallace Collection and at Windsor Castle.

The Exhibition has been arranged in the Loan Court on the ground floor of the Museum, and is now open to the public. A brief descriptive list of all the furniture exhibited, with thirteen illustrations of selected pieces, will be issued, price 3d.

Exhibition of Antique Furniture and Tapestries.

At the Exhibition in aid of Edenhall Hostel, Kelso, for Limbless Sailors and Soldiers, now being held at the New Gallery, Edinburgh, Sir Robert Lorimer, A.R.S.A. [F.] and Mr. John Warrack, have arranged a Loan Collection of Antique Furniture and Tapestries and the Allied Domestic Arts. For this exhibition the King has lent the fine Queen Anne settee, covered with needlework of the period, from the private drawing-room at Holyrood, and also a pair of needlework chairs *en suite*. Sir Robert Lorimer has presented to the Library a copy of the Exhibition Catalogue—a very creditably produced brochure containing interesting notes on the treasures exhibited, together with photographic illustrations of tapestry, needlework, cabinets and furniture which figure in the collection.

The Manchester Society and the Old Infirmary Site.

At the special meeting of the Council of the Manchester Society of Architects, held Friday, 2nd March 1917, the following resolution was passed:—"The Council of the Manchester Society of Architects learns with profound regret that a Committee of the Corporation proposes to utilise the 'Old Infirmary Site' as a tramway centre. It enters a strong protest against the scheme for making a Tramway centre and erecting buildings on it in the manner set forth on the plan published in the report of the Special Committee on the Passenger Transportation Problem, and presses for a further consideration of the whole matter with a view to carrying out the scheme for which the Infirmary Site was specially purchased."

Royal Academy: Photographs in Architectural Room.

By a Special Regulation for the Summer Exhibition of 1917, photographs of architectural work will be admissible this year. The size of the photographs must be not less than 12 inches by 8 inches; they should be framed in slight wood frames with or without mounts, which may be tinted. The buildings shown must have been erected within the last ten years. More than one photograph of the same building may be included in one frame. Photographs of architectural sculpture will also be admitted under similar conditions.

CORRESPONDENCE.

British Red Cross Society: A.A. Detachment.

37 Great Smith Street, Westminster, S.W., 26 Feb. 1917.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—With talk of National Service in the air, most people are asking themselves how they can best use their energies to the national good. May I bring the claims of the Architectural Association Red Cross Detachment before them, as we are badly needing more members? The value of the work the Detachment is doing cannot be over-estimated. Those members we have are working very hard, but it will not be possible for them to cope with all the duties that the Detachment is called upon to perform unless their numbers are increased. We appeal particularly to members of the architectural profession to join us, and I am sure that their only regret will be that they did not come forward earlier and help in what is one of the finest branches of voluntary work that can be undertaken. Should there be any whose sympathies are with us but who are prevented from becoming members by age or distance from town, they can give practical evidence of their sympathy by sending donations, either for the general funds of the Detachment, which always need augmenting, or by subscribing towards the Ambulance which we are hoping to buy from funds raised by our members for use in connection with the Detachment work. Communications should be sent to me at the address given above.—Yours faithfully,

F. R. YERBURY, Quartermaster.

MINUTES.

At a Special General Meeting, convened in accordance with By-law 70, to elect the Royal Gold Medallist for the current year, held Monday, 5th March 1917, at 4.30 p.m.—Present: Mr. Ernest Newton, A.R.A., President, in the Chair; 17 Fellows (including 8 members of the Council) and 5 Associates (including 1 member of the Council)—the object of the Meeting having been announced:

The President moved, Mr. E. Guy Dawber, Hon. Secretary, seconded, and it was

RESOLVED, unanimously, that subject to His Majesty's gracious sanction, the Royal Gold Medal for the promotion of Architecture be presented this year to Monsieur Henri-Paul Nénot, Membre de l'Institut [Hon. Corr. M., Paris], in recognition of the merit of his executed work.

The Special General Meeting then terminated.

At the Fifth General Meeting (Business) of the Session 1916-17, held Monday, 5th March 1917, following the Special General Meeting above recorded and similarly constituted, the Minutes of the Meeting held Monday, 5th February 1917, having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced the decease of Charles Trubshaw, elected Associate in 1865, Fellow in 1882, and placed on the list of Retired Fellows in 1908; also of Henry Greig Badenoch (Newcastle-on-Tyne), elected Fellow in 1907.

It was resolved, on the motion of the Hon. Secretary, that letters of sympathy be addressed to Mr. Richard C. James [F.], of Bristol, Mr. W. G. Rowan [F.], of Glasgow, and Mr. H. Heathcote Statham [F.], all of whom had recently lost sons in the war.

The following candidates were elected by show of hands:—

AS FELLOWS (2)

MORRIS: PERCY [Cates prizeman 1897. Assoc. 1897].
WHEELER: CHRISTOPHER WILLIAM FREDERICK [Assoc. 1902].

The Meeting terminated at 4.40 p.m.

NOTICES.

ARCHITECTS AND NATIONAL SERVICE.

At a recent representative Deputation of Architects, Mr. Neville Chamberlain said that he would welcome advice as to the most suitable employment for Architects in the National Service Scheme, under which he asked all professional men to enrol, stating that he hoped to deal with such offers on a suitable basis. The Deputation has resulted in the formation of an Advisory Council, which has decided to ask all architects in a position to sign the National Service Form to send it IN DUPLICATE to the nearest Architectural Society allied to the Royal Institute, or to the latter in the case of practitioners in London and the Home Districts, so that the whole of these Forms may be collected and sent to the National Service Headquarters in the form of a united offer from the whole Profession.

It is hoped that a prompt and extensive response may result from this appeal.

ERNEST NEWTON, President R.I.B.A.
Chairman, Architects' War Committee.

ASTON WEBB,
Chairman, Advisory Council.

Annual Elections: Council Nomination List.

Members are requested to note that to save expense the Council Nomination List will be issued enclosed with the April number of the JOURNAL and not sent separately as has hitherto been the practice.

Informal Conferences at the Institute.

At 3.30 p.m.

21st March.—"New Materials and Methods as influencing Design." Opener, Mr. H. D. Searles Wood [F.]; Chairman, Mr. E. Guy Dawber [F.].

18th April.—"Architecture and Civilisation" (adjourned from 24th January). Chairman, Mr. F. W. Troup [F.].

2nd May.—"Education of the Architect" (adjourned from the 21st February). Opener, Mr. Harry Wilson; Chairman, Professor W. R. Lethaby [F.].

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REPORT OF THE COUNCIL FOR THE OFFICIAL YEAR 1916-1917.

SINCE the publication of the last Annual Report the Council have held 14 Meetings.
The following Committees appointed by the Council have met and reported from time to time on the matters referred to them :—

Board of Architectural Education.
Competitions Committee.
Fellowship Drawings Committee.
Finance and House Committee.
Royal Gold Medal Committee.
Town Planning Committee.
Selection and General Purposes Committee.

Conditions of Contract Revision Committee.
Timber Specification Committee.
Architects' War Committee and Sub-Committees.
Charing Cross Bridge Committee.
Specialists Committee.
Memorial Service Committee.
Informal Conferences Committee.

Particulars of the work of some of these Committees are embodied in this Report under various headings.

Obituary. The losses by death have been as follows :—

FELLOWS.

Badenoch : Henry Greig.
Blanc : Hippolyte Jean.
Briggs : Robert Alexander.
Cratney : Edward.

Greenop : Edward.
Hine : George Thomas.
Robson : Edward Robert.
Spiers : Richard Phené.

Thomas : Ernest Montague.
Thornton : Edward.
Willmott : Ernest.
Wood : Joseph Foster.

ASSOCIATES.

Bird : David.
Green : Theodore Knolles.

Hancock : Charles Rennels.
Henry : Robert.

King : Charles Robert Baker.
Richards : Harold Beckwith.

LICENTIATES.

Adlersparre : Christopher de.
Blair : William Wallace.
Bell : Charles William.
Benton : James Edwin.

Bryden : Andrew Francis Stewart.
Edwards : John Powell.
Hewitt : Thomas Francis.

Higginbottom : Gilbert.
Hodder : Richard Nicholl.
Lawrence : Edwin Cecil.

RETIRED FELLOWS.

Appleton : Colonel Edward.
Burwell : Frederick William.

Hebb : John.
Leiper : William.
Nevill : Ralph.

Payne : Alexander.
Trubshaw : Charles.

HONORARY ASSOCIATES.

Burgess : James.

Dunn : Archibald.

Linton : Sir James Dromgole, P.R.I.

HONORARY CORRESPONDING MEMBERS.

De Vogüé : Charles Jean Melchior, Marquis.

De Stuers : Chevalier Victor Eugène Louis.

In addition to the above the Council have to record the loss of 4 Fellows, 25 Associates, 2 Licentiates, 11 Students, 1 Hon. Fellow, and 1 Hon. Associate, who have fallen in the War. Particulars of these are given on a later page of this Report.

Membership.

The following table shows the present subscribing membership of the Royal Institute compared with corresponding periods in 1913, 1914, 1915, and 1916 :—

	Fellows.	Associates.	Hon. Associates.	Total.
1913	847	1,630	54	2,531
1914	852	1,695	56	2,603
1915	857	1,713	54	2,624
1916	852	1,679	52	2,583
1917	842	1,656	48	2,546

During the official year since the last Annual General Meeting 19 Fellows and 23 Associates have been elected, as against 38 Fellows and 44 Associates the previous year.

Licentiate.

There are now 1,890 Licentiate on the roll as against 1,919 last year. Since the publication of the last Annual Report 11 Licentiate have passed the Examination qualifying for election to the Fellowship, and 9 of these have been duly elected as Fellows.

The Examination.

Under the new Regulations the Preliminary Examination qualifying for registration as Probationer has ceased to be held, and candidates for Probationership are required to furnish to the Council satisfactory evidence of their attainments before being passed for registration. From November 1915, when the last Preliminary Examination was held, until March 1917, fifty candidates have satisfied the requirements and have been registered as Probationers.

The large majority of Probationers and Students of the Institute being on military service, it was decided to hold the Intermediate and Final Examinations once only during the official year—viz., in June—and the autumn examinations were dropped. The following table, giving the results of the Examinations, shows that 17 Students only have been added to the Register during the year, and that 13 candidates have passed the Examination qualifying for Associateship :—

	Admitted.	Exempted.	Examined.	Passed.	Relegated.
INTERMEDIATE EXAMINATION . . .	18	14	4	3	1
FINAL AND SPECIAL EXAMINATIONS . .	20	—	20	13	7

On the recommendation of the Board of Architectural Education it has been decided to hold the Final and Special Examinations in India provided satisfactory arrangements can be made. The first Examination would be held in Bombay.

The Statutory Examination qualifying for candidature as District Surveyor in London, or as Building Surveyor under Local Authorities, was held in October, and resulted in the passing of two out of the three candidates who presented themselves for examination.

The Council tender their grateful acknowledgments to the Honorary Examiners for their arduous labours in connection with the Examinations.

Since the issue of the last Annual Report the Council have appointed the following members to act as representatives of the Royal Institute on the various bodies indicated :—

Mr. H. D. Searles-Wood	} Imperial Institute (Colonial Timbers); Cabinet Committee on Afforestation (timbers suitable for building purposes).
Mr. W. E. Vernon Crompton	
Mr. Digby L. Solomon	
Mr. Arthur Keen—Proposed Civil Reserve of Engineer Officers.	
Mr. Gillbee Scott	} Special Commission on the Fire Resistance of Concrete and Reinforced Concrete.
Mr. Herbert Shepherd	
Professor Adshead	} Teachers' Registration Council (Examinations of Universities and Professional Bodies).
Mr. H. V. Lanchester	
Mr. H. V. Lanchester	} University of London (Architectural Education Committee).
Mr. Paul Waterhouse	
Sir John Burnet, R.S.A., LL.D.—Conjoint Board of Scientific Studies (Deputation to Lord Crewe).	
Mr. E. Guy Dawber—Professional Classes War Relief Council.	
Professor Adshead	} National Conference on Housing after the War.
Mr. H. V. Lanchester	
Mr. H. D. Searles-Wood—Board of Scientific Societies.	
Mr. Hastwell Grayson—Elmes Testimonial Fund, Liverpool.	
Mr. W. R. Davidge—Garden Cities and Town Planning Association (Housing of Workers at New London Docks).	
Professor Adshead—University College of S. Wales (Sub-Committee re proposed Chair of Town Planning and Architecture).	

During the course of the year the President has appointed the following members to act as Arbitrators in connection with building disputes:—

Mr. W. H. Atkin-Berry.	Mr. J. Alfred Gotch.	Mr. Alan E. Munby.	Mr. W. Gillbee Scott.
Mr. W. E. Vernon Crompton.	Mr. Edward Greenop.	Mr. Godfrey Pinkerton.	Mr. Herbert Shepherd.
Mr. Alfred W. S. Cross.	Mr. W. A. Harvey.	Mr. Herbert A. Satchell.	Mr. John W. Simpson.
Mr. John B. Gass.			

Grants. Since the issue of the last Annual Report the Council have made the following grants:—

Architectural Association . . .	£100 0 0	London Society (towards expenses of	
Architects' Benevolent Society . . .	100 0 0	Charing Cross Bridge Bill Petition) £10 10 0	
A. A. Active Service Committee . . .	21 0 0	British School at Rome . . .	3 3 0

In addition to the grant to the Architectural Association, the Council have been enabled to obtain for that body a further sum of £200 from the Jarvis Trustees.

Royal Gold Medal. The Royal Gold Medal was awarded to Sir R. Rowand Anderson, LL.D., F.R.S.E. [F.]. Sir Robert was, unfortunately, not well enough to be present in person at the Presentation Meeting, and the Medal was received on his behalf by Sir Robert Inches, Lord Provost of Edinburgh. It has been decided to award the Medal this year to the distinguished French architect, M. Henri Paul Nénot, Membre de l'Institut, architect of the New Sorbonne, Paris [*Hon. Corr. M.*], in recognition of the merit of his executed work. His Majesty has graciously signified his approval of the award, and the presentation will be made to M. Nénot at the General Meeting on the 25th June.

The War. The work of the Royal Institute continues to be seriously affected by the war. The programme of Sessional Papers remains suspended, only business of a routine and uncontroversial nature has been transacted at the General Meetings, and the Prize Competitions for the year have again been postponed.

Members who have joined the Forces since the outbreak of War now number 72 Fellows, 513 Associates, 312 Licentiates, and 293 Students. Since the last Annual Report the following have fallen:—

FELLOWS.			
CORBETT: ALFRED EDWARD . . .	Capt., Border Regt.		Killed in action.
FLETCHER: HERBERT PHILLIPS, D.S.O., <i>Croix de Guerre</i> . . .	Major, R.F.C.		Accidentally killed on service.
FRANCE: ARTHUR ALDERSON . . .	2nd Lieut., Royal Engineers		Killed in action.
LIVESAY: GEORGE AUGUSTUS BLIGH . . .	Lieut., South Wales Borderers		Killed in action.
ASSOCIATES.			
AITKEN: ANDREW DANSKINE . . .	2nd Lieut., Royal Engineers		Killed in action.
BAUSOR: THOMAS PAUL . . .	2nd Lieut., Shropshire Light Infantry		Killed in action.
BENNETT: JAMES . . .	Lieut., Royal Engineers		Killed in action.
BRAITHWAITE: JAMES ELLIS . . .	Private, West Yorks Regt.		Died of wounds.
BULL: JOSEPH WILLIAM . . .	2nd Lieut., Royal Engineers		Died of wounds.
CUBBY: JOSEPH BEEKELEY . . .	Capt., Northumberland Fusiliers		Killed in action.
DURRANT: ARTHUR MICHAEL . . .	Capt., Royal Engineers		Killed in action.
GRIFFIN: DOUGLAS MORLEY . . .	2nd Lieut., King's Liverpool Regt.		Died of wounds.
GRISSELL: FRANCIS . . .	Lieut., Coldstream Guards		Killed in action.
GROUND: JOHN KINGSTON . . .	2nd Lieut., Royal West Kent Regt.		Killed in action.
HADWEN: NOËL WAUGH . . .	Capt., Duke of Wellington's Regt.		Killed in action.
HONAN: MATTHEW . . .	Capt., South Lancs. Regt.		Killed in action.
LOVELL: CHARLES ERNEST . . .	Lieut., Royal Engineers		Killed in action.
MACKENZIE: GILBERT MARSHALL . . .	Capt., Seaforth Highlanders		Killed in action.
PAPWORTH: ALFRED WYATT . . .	2nd Lieut., Royal Engineers		Killed in action.
PETCH: ERNEST SCOTT . . .	Private, Royal Scots Regt.		Killed in action.
PHILP: RICHARD MANNING HAIG . . .	Capt., Royal Field Artillery		Killed in action.
PILLING: PERCY CUNLIFFE . . .	Capt., Loyal North Lancs. Regt.		Died of wounds.
PYWELL: WILLIAM JACKSON . . .	Private, Hon. Artillery Company		Killed in action.
RUSHWORTH: TOM SADLER . . .	Capt., City of London Regt.		Killed in action.
STONEHOUSE: CHARLES . . .	Lieut., East Lancs Regt.		Killed in action.
STUBBS: EDWARD WOODHOUSE . . .	Lie.-Cpl. Royal Army Medical Corps		Killed in action.
STURGEON: ROBERT VICTOR . . .	Corpl., Manchester Regt.		Killed in action.
TAYLOR: JOSEPH HENRY . . .	Lie.-Corpl. Royal Army Medical Corps		Killed in action.
WEBB: PHILIP EDWARD . . .	2nd Lieut., Royal Engineers		Killed in action.
WINCH: ARTHUR . . .	Corpl., West Yorks Regt.		Killed in action.
LICENTIATES.			
ABERCROMBIE: BALFOUR . . .	Private, Black Watch		Died of wounds.
CAUDWELL: ARTHUR CYRIL . . .	Private, Queen's Westminster Rifles		Killed in action.

STUDENTS.

BAGSHAW: ARTHUR SAMUEL	Trooper, West Kent Yeomanry	Killed in action.
FORD: LAWTON STEPHEN	Lieut., Queen's Royal West Surrey Regt.	Killed in action.
GORDON: DONALD JERVIS	2nd Lieut., Border Regt.	Killed in action.
HILLYER: WILLIAM HAROLD	Capt., Royal Engineers	Killed in action.
HORSNELL: ALIOK GEORGE	2nd Lieut., Suffolk Regt.	Killed in action.
JENKINS: WILLIAM M.	Lieut., Welsh Pioneer Batt.	Killed in action.
PATERSON: HENRY FRANKLIN	Private, Hon. Artillery Company	Killed in action.
SHAPLEY: ALFRED EDWIN	Lieut., Northumberland Fusiliers	Killed in action.
STOTT: ALFRED EDGAR	King's Liverpool Regt.	Died of wounds.
WESTWOOD: WALTER R.	2nd Lieut., Royal Field Artillery	Died of wounds.
WOODLEY: STANLEY W.	2nd Lieut., Royal Flying Corps	Killed in action.

HONORARY FELLOW.

KITCHENER OF KHARTOUM: FIELD-MARSHAL EARL	Drowned on service.
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HONORARY ASSOCIATE.

DONALDSON: SIR HAY FREDERICK	Drowned on service.
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Altogether, the Institute has lost in the War 1 Hon. Fellow, 1 Hon. Associate, 4 Fellows, 38 Associates, 9 Licentiates, and 28 Students.

Since the last Annual Meeting the Secretary and the Chief Clerk have been called up for the Army. The Council are extending to them the consideration that has been accorded to other members of the staff, and are supplementing their military pay in order that they may suffer no diminution of income whilst on service.

In a letter to Mr. Lloyd George when War Minister the President drew attention to the fact that many highly-trained young architects were being wasted in the ranks of ordinary line regiments, and suggested that they should be appointed to Cadet Corps with a view to being granted commissions in the Royal Engineers. Numerous architects have since obtained commissions in this way.

As a result of a personal protest to the War Office against the claims of architects being ignored for such appointments as supervisors of buildings for Army purposes in France, the President was asked to nominate five architects for such posts. This was done, and it is understood that their work has been highly satisfactory. The President is endeavouring, in conjunction with the Surveyors' Institution, to get substantive rank for professional men employed in this and similar work, and the War Office has the matter under consideration.

Application having been made to the Institute by the War Office for men able to speak French to arrange for billeting in connection with the British Forces in France, the requirement was made known, and architects found capable of filling the position were appointed.

The President has been in communication with the War Office with the object of securing for architects appointments in connection with billeting troops in England, and it is understood that architects qualified for this kind of work will be appointed as occasions offer.

In connection with the Order in Council made last July imposing restrictions upon private building, the President has accepted an honorary position at the Ministry of Munitions for the purpose of carrying out a system of inspection to ensure that buildings in course of erection are not stopped without regard for their protection and security. The staff of inspectors is composed of architects accustomed to deal with buildings of every kind, and care is taken to administer the Order with scrupulous fairness.

Endeavour has been made by the President to secure the appointment of architects as inspectors of labour at munition factories in course of erection. He has also been instrumental in securing for owners of Controlled Establishment Canteens the right of employing their own architects for the preparation of plans.

The Institute has supported during the year the various organisations which it was instrumental in promoting, and on which it is represented, with the object of assisting architects whose practices have come to a standstill in consequence of the war. This has been effected either by finding them positions in Government and other offices, or by granting them

War Appoint-
ments for
Architects.

War Employ-
ment for
Architects.

financial aid. The hospitality of the Institute Galleries has been afforded to the Civic Survey of Greater London, where work has been in progress since the beginning of the scheme, now nearly two years ago. This has provided employment for 80 architects, and for 60 of these better positions have been found in Government Departments and elsewhere. The Civic Surveys of South Lancashire and South Yorkshire have also fulfilled the same purpose as that of London, and have found employment for some 35 architects. Acting in conjunction with the Architects' War Committee and its Sub-Committee, the Professional Employment Committee, a large number of other positions have been found for architects with private firms as well as in the following Government Departments: The Board of Trade, Board of Inland Revenue, Inland Revenue Land Valuation Department, Office of Works, Ministry of Munitions (Enfield Lock Powder Factory, Department of Explosives, Central Clearing House, Trench Warfare Supply Department, etc.), Admiralty (London and Sheerness), Aeronautics, War Office (Woolwich Arsenal, C.R.E. Office, Aldershot, etc.), Central Control (Liquor Traffic) Board. The expense of carrying out the work of the various Committees has been largely borne by the Institute. A brief account of the activities of the War Committee since its inception in August 1914 will be found in the Committee's Report to the Council printed on a subsequent page.

Representations have been made to the Reconstruction Committee as to the desirability of passing plans for asylums and other buildings during the present period of slackness in architectural work in order that the plans may be prepared at once in readiness for use at the restoration of peace. The Reconstruction Committee are in communication with the Board of Control on the subject, and favourable consideration is anticipated.

Architects and National Service. A deputation arranged by the R.I.B.A. and the Architects' War Committee, and consisting of representatives of the R.I.B.A. and its Allied Societies, the Architectural Association, the Society of Architects, and unattached architects, waited upon Mr. Neville Chamberlain, Director-General of National Service, to urge in connection with the National Service scheme the utilisation of architects by the State for the special services for which their training has fitted them. The deputation was very sympathetically received, and Mr. Chamberlain approved a proposal put before him that the profession should appoint a committee to confer with him from time to time and suggest the kind of work that architects were qualified to undertake. An Advisory Council representative of the whole profession was at once formed, and an appeal has been published urging architects to sign the National Service form and send it to the R.I.B.A. or to the Allied Society of their district, in order that the forms may be all sent in together as a united offer from the whole profession. The Advisory Council has also in preparation a list of the services in which architects are likely to be useful, which is to be sent to Mr. Chamberlain with a suggestion that his Department should indicate the nature of the vacancies it is desired to fill.

Informal Conferences. The Council, adopting a suggestion made by Professor Lethaby at the Opening Meeting of the Session, organised a series of informal conferences at the Institute on matters not only of architectural, but of general public interest. Six meetings have been held, and two more are arranged for. The subjects discussed include "Architecture and Civilisation" (24th January and 18th April), "Education of the Architect" (7th and 21st February, and a further meeting to be held on 2nd May), "The Control of Street Architecture" (7th March), and "New Materials and Methods as influencing Design" (21st March). Another conference will be held on the 16th May, when the subject of "Co-operation in Design" will be considered. Valuable and very comprehensive contributions have been made to the discussions, and will be published in the JOURNAL as space permits. The conferences have served a most useful purpose, and it is intended that they shall bear fruit. The views expressed will be duly considered by the Committees dealing with the subjects discussed, and good practical results may be anticipated when conditions again become normal.

Conditions of Contract Revision. The Conditions of Contract Revision Committee, who have held 38 meetings, have had under review a large number of documents and legal decisions relating to the subject referred to them, and considerable progress has been made with the work of revision. The Committee hope shortly to be in a position to present a report to the Council.

Industrial and Scientific Research. The Privy Council Committee for Industrial and Scientific Research having invited the Institute to send representatives to meet Sir Wm. McCormick and other members of the Government Committee, a Sub-Committee of the Science Standing Committee met the Government Committee, and suggested a number of subjects suitable for research in connection with building materials. The scope of the Institute representatives' relations with the Government Committee has since been largely extended and promises to have substantial results, as will be seen from the Report dealing with this matter on a subsequent page. The Sub-Committee, with other members added, have now been given the powers of a full Committee to act as they deem expedient in their negotiations with the Government Committee.

Science Teaching. The Council have given their support to a Memorandum drawn up by the British Science Guild for presentation to the Government, urging that the State should take immediate measures to promote the more general and effective teaching of Science in Public Schools and other Secondary Schools in preparation for more advanced teaching in the Universities and Technical Colleges, and to co-ordinate the work of the science laboratories of such institutions with the activities of progressive industry and commerce.

Timber for Building Purposes. The Cabinet Committee on Afforestation invited the Institute to give evidence as to the best kinds of trees to plant to produce suitable timber for building purposes. Messrs. Searles-Wood, Vernon Crompton, and Digby Solomon were appointed for the purpose, and at the Cabinet Committee's request have drawn up and submitted to them a report upon the subject.

Amendment of the London Building Acts. The Art Standing Committee having submitted to the Council in June 1915 a report containing various suggestions for the amendment of the London Building Acts, the Council referred the Report to the Practice and Science Standing Committees for their comments, and on the recommendation of the former a Special Committee has now been appointed to deal with the whole question in order to be ready to meet any proposals that the London County Council may bring forward when further amendment of the Acts is under consideration.

Australian Parliament House Competition. The Government of the Commonwealth of Australia having decided upon the resuscitation of the Competition for the Federal Parliament House at Canberra, which had been postponed at the outbreak of war, the Council, on the appeal of the Royal Victorian Institute of Architects, and supported by the principal French architectural societies, strongly protested to the Commonwealth Government against the competition being proceeded with at the present time, pointing out that all the architects of Great Britain and the Allied nations who were of military age, and large numbers also of the architects of the Overseas Dominions, were serving with the Forces and unable to compete—hence the competition would be practically confined to neutral countries, and would be in no sense international as originally intended. The Commonwealth Government declined at first to postpone the competition, but a further remonstrance was made by the Council through the High Commissioner in London, and eventually a cablegram was received stating that it had been indefinitely postponed.

Ottawa Government Buildings Competition. A complaint reached the Institute that in the competition for the New Departmental and Courts Buildings at Ottawa the Dominion Government were not fulfilling the obligations to competitors as set out in the General Conditions for Competition Designs, the terms of which had been considered and approved by the Institute. The Council in consultation with the Competitions Committee addressed a letter of protest to the Deputy Minister of Public Works, Ottawa. The Minister, in reply, made concessions which the Council consider will afford a satisfactory temporary settlement, and it is hoped that other proposals made by the Council in the interests of fairness to the competitors will be adopted by the Dominion Government and be carried into effect when the final stages of the competition are proceeded with after the war.

Charing Cross Bridge. In the Session of 1916, the Institute, in conjunction with the London Society, successfully petitioned Parliament against the South-Eastern Railway Company's Bill, the passing of which would have the effect of retaining the unsightly railway bridge at Charing Cross and of deferring

indefinitely the proposal for the much-needed road-bridge across the river at this point. The Bill is again before the present Session of Parliament, and the Institute and the London Society have again petitioned against it. The Bill, however, has passed the second reading and has been referred to a Committee of the House of Commons. It is intended to keep the Joint Committee of the Institute and the London Society in being with a view to their keeping in touch with the subject and taking such action as may be deemed expedient in case of further developments.

War Economies. Owing to the depleted staff, the increased printing charges, and the shortage and great advance in the price of paper, the Council have been compelled to stop the fortnightly issues and to bring out the *JOURNAL* monthly. As a further measure of economy the *KALENDAR* has been suspended, its place being taken by a small pamphlet giving the fixtures of the session, lists of new members, changes of address, etc.

Finance. During the period under review, the loss of income through the remission of subscriptions of members serving with the Forces has amounted to nearly £1,100. By the exercise of the strictest economy, however, substantial saving has been effected in various items of expenditure, and after meeting all liabilities the Council are able to announce a surplus of over £400. The following table shows in round figures the sum of the principal items of income and expenditure in the year before the War, and since:—

	1913.	1914.	1915.	1916.
Income.	£12,869	£14,114	£10,740	£8,294
Expenditure	11,567	11,391	10,020	7,882
Surplus	1,302	*2,722	719	412
Bank overdraft	£4,846	£2,707	£2,044	£1,900
Examination fees	1,633	1,169	749	317
Examination expenses	357	353	237	84
Use of rooms and Galleries and rent from tenants	392	454	85	80
Grants	534	1,148	1,501	474
<i>Journal</i>	2,129	1,804	1,531	1,118
General printing, etc.	1,115	944	694	449
<i>Kalendar</i>	350	323	333	†37
Civic Survey	—	—	28	28
War Committee	—	—	159	240
Subscriptions in arrear	776	1,063	1,169	1,946

* Increase due to final dividend from Architectural Union Company on liquidation.

† Supplement only.

REPORT OF THE BOARD OF ARCHITECTURAL EDUCATION.

The Board have held eight meetings since the issue of the last Annual Report, and the members appointed by the Council in 1915 have since constituted the Board, no election having taken place in 1916. Mr. John Slater presided at the meetings until October last when a serious breakdown in health compelled him to relinquish his duties. The Board desire to place on record their appreciation of his great services and their sincere regret that ill-health has compelled him to sever his connection with the Board, of which he has been a member since its foundation.

Committees.—The Testimonies of Study, Examinations and Exemptions Committees have met and reported from time to time.

Problems in Design.—During the year 36 designs have been received and adjudicated on, and of these 24 have been approved.

The Examinations.—The Board has conducted the Intermediate, Final and Special Examinations as usual, and the results as reported to the Council have been published.

Examinations in India.—The Council have approved a recommendation of the Board to hold the Final and Special Examination in Bombay, provided that satisfactory arrangements can be made.

Government Reconstruction Committee.—A letter from this Committee appointed by the Prime Minister asking for certain information with regard to architectural students who had joined the

Army was considered by the Board. Information on the subject has been obtained from all the recognised Schools of Architecture, and a tabulated statement containing the information asked for was sent to the Reconstruction Committee.

Architectural Education in Wales.—The question of providing facilities for architectural education in connection with the Welsh University is engaging the attention of public men in Wales in view of the fact that a Royal Commission has been appointed in connection with the Welsh University. It is proposed to get together data on the subject, and the Board has promised to assist in this object, provided that a request is made to them to that effect by the Welsh University.

Public Schools Science Masters' Association.—Mr. Walter Cave, as a representative of the Board, and Mr. Alan E. Munby, as a representative of the Examiners, were appointed to attend a meeting of the Public Schools Science Masters' Association with the object of bringing the Board into touch with that Body, and in order to make the nature of Architectural Education more widely known in Public Schools.

Entrance Examinations to Professions.—In view of the great variety of examinations and certificates qualifying for entrance to the Universities and Professions, the Teachers' Registration Council invited members of various governing bodies to take part in a conference to consider if these demands could be simplified. The Council nominated Prof. Adshead and Mr. H. V. Lanchester to attend, and they have reported that the Conference decided to form a permanent council of twenty elected as follows:—

Five Members by a Standing Committee representing the Universities.					Professions.
"	"	"	"	"	Teachers' Registration Council.
"	"	"	"	"	School Administrators.

The Board of Architectural Education resolved that the R.I.B.A. representatives should continue to act as members of the Professional Standing Committee.

REPORT OF THE ART STANDING COMMITTEE.

Owing to the concentration of the energies of an ever-increasing proportion of the population of the country upon the prosecution of the War and the consequent suspension of architectural projects of all kinds, the matters that have come under the consideration of the Art Standing Committee during the last twelve months have been few in number and small in importance.

In the absence of Mr. Edward Warren (called abroad, as stated in the last Report of the Committee), the Chairmanship of the Committee has devolved upon Mr. H. Heathcote Statham, Mr. H. P. Burke Downing being the Honorary Secretary.

The Committee lament the loss of Mr. Philip E. Webb and Mr. A. Wyatt Papworth, killed in action, and they have been temporarily deprived of the services of other members who have joined the Forces or have been occupied with other work in connection with the War.

The Committee have held six meetings since their last Report.

Some observations of Mr. Lethaby on the occasion of the Presidential Address had early attention from the Committee, who recommended to the Council that steps should be taken with a view to the holding of such informal Conferences as were suggested by Mr. Lethaby for the exchange of views among members of the profession and others interested in architectural development on such matters as the increasing employment of building materials of modern invention, and the bearing of such materials upon design and construction. The Committee are glad to think that these suggestions have been fruitful and that interesting conferences have resulted.

Some few particular proposals came under the consideration of the Committee, but for various reasons have not called for action at the present time. One matter may be mentioned—viz., the proposal for the demolition of part of the Church of St. Alphege, London Wall, in the City of London, in connection with a scheme for the Union of the Benefice of St. Alphege with that of St. Mary, Alder-

manbury. In this case there seemed to the Committee, on a report made by Mr. H. H. Statham, that there was sufficient of architectural interest in the front towards Aldermanbury to justify a recommendation that if practicable it should be preserved in the erection of any new building on the site, and Mr. Statham, with the concurrence of the Committee, has made a representation to that effect to the Ecclesiastical Authority.

The Committee were able to arrange for an exhibition in the Common Room of the Institute of an interesting series of measured drawings and studies of Indian architecture made by Mr. E. C. Henriques, a Government of India Scholar in Architecture, illustrating the three principal styles of Saracenic work in India, and including some examples of Hindoo work at Rajputana.

REPORT OF THE LITERATURE STANDING COMMITTEE.

Since making their report last year the Literature Standing Committee have met five times to select books to be bought for the Library and to transact the business of administration.

The Joint Hon. Secretary, Mr. M. S. Briggs, is now serving in the Army in Egypt, and has therefore been unable to take any part in the work of the Committee.

During the year the Committee have lost an old and honoured member, Mr. R. Phené Spiers, who died on 3rd October 1916. Mr. Spiers was for many years a member of the Committee, and its Chairman from 1899 to 1911. His authoritative and wide knowledge of architectural history and literature was of the greatest value in all matters connected with the development of the Library. Mr. Spiers bequeathed a portion of his valuable collection of books on architectural subjects, two admirable water-colours and other drawings to the Library. Through the courtesy of Mr. Walter Spiers a small sub-committee was able to meet him and make the necessary selections.

Mr. Herbert Batsford, the architectural publisher, died on 14th January last. By his death the Committee and all who are interested in architecture have lost a valued helper.

The Council agreed to the Committee's recommendation, and five drawings by the late Mr. C. E. Mallows have been acquired for the Library.

The late Lieut. Francis Grissell, a young Associate who was killed in the War, bequeathed £500 to the Institute for the use of the Library. A portion of this sum has been placed to the credit of the Literature Committee for special purchases of books, and the remainder has been invested.

A portfolio of sketches, photographs, and cuttings from professional papers of executed and proposed buildings by the late Mr. W. H. Lynn, R.H.A., together with some letters, has been given to the Library by Miss Cooper, of Belfast, through the instrumentality of Mr. Robert M. Young. Sir Aston Webb contributed an interesting article on this collection to the JOURNAL for February.

Mr. J. D. Crace [*Hon. A.*] has presented a volume and two portfolios of sketches and drawings, mostly in colour, of details of Italian colour decoration, as well as some charming sketches of English work. These drawings cover the work of practically half a century, and will form a most interesting and valuable addition to the Institute collection, especially as they include the originals of the illustrations in his book *The Art of Colour Decoration*. It is proposed to exhibit the drawings in the Institute Galleries so that members may have an opportunity of appreciating the beauty of Mr. Crace's work.

Mr. Wigglesworth has given a complete set of Transactions of the Scottish Ecclesiological Society. Mr. Hilton Nash has presented an album of water-colour sketches of architectural and other subjects of which he is the artist. Mr. Gordon Hemm has given two portfolios of reproductions of his measured drawings of the old Town Hall at Manchester.

From Mr. George Scamell has been received a large and individual collection of photographs taken by himself, chiefly of English country churches in the home counties. An article on this collection is to appear in the JOURNAL. The photographs will make an interesting exhibition in the Institute Galleries when the necessary arrangements can be made.

As indicated in the Committee's last report, various exhibitions of drawings presented to the

Library have been recently held in the East Gallery, representative selections being made from the work of Norman Shaw, William Burges, George Edmund Street, Eden Nesfield, and Philip Webb. The exhibitions aroused great interest among members, and were also much appreciated by outside visitors. Special articles have appeared in the JOURNAL on the Burges Drawings by Mr. R. A. Briggs (now deceased) and on the Street Drawings by Mr. Walter Millard.

The following is the Librarian's Report to the Committee :—

During the twelve months ending the 31st March of the previous year 187 volumes and 29 pamphlets have been added to the Library, exclusive of periodicals, reports and transactions of Societies, and parts of works issued in serial form. The drawings presented numbered 760, photographs and prints 1,007 sheets.

The number of works presented was 117 volumes and 27 pamphlets.

Works purchased numbered 70 volumes and 2 pamphlets, of which 17 were added to the Loan Library.

The attendance of readers in the Reference Library numbered 2,219.

The number of books issued on loan was 1,043.

The number of tickets issued for admission to the Library, other than to members of the Institute or to Students and Probationers, was 22.

The books issued through the post numbered 153.

Owing to the fact that the existing war conditions have caused a considerable falling off in the number of students studying for the examinations, the attendance of readers in the Library has been much smaller than in normal years. These circumstances, however, have had the advantage of enabling a great deal of cataloguing work to be done in connection with the recent important presentations of original drawings, photographs, and prints numbering over 3,000 sheets, mounted and unmounted.

Donations of books, pamphlets, or drawings have been received from Mr. Benj. Ingelow, Mr. J. D. Crace, Mr. Reginald Blomfield, Professor Patrick Geddes, Mr. Keith D. Young, Sir Robert Lorimer, M. J. M. Poupinel, Mr. H. W. Wills, Signor Giulio Tini, Mr. H. D. Searles-Wood, The Rt. Rev. Dr. G. F. Browne, Mr. C. Harrison Townsend, Mr. Barry Parker, Mr. T. L. Watson, Messrs. B. T. Batsford, Ltd., Sir William St. John Hope, Mr. James R. Wigfull, the late Mr. Chas. Baker King, Mr. W. E. V. Crompton, Mr. Ralph Adams Cram, Mrs. Reeve, Mr. Henry Lovegrove, Mr. Robert M. Young.

Among the books purchased or presented during the year may be mentioned : Guy Lowell's *Smaller Italian Villas and Farmhouses*, Cortissoz's *The Work of Charles A. Platt*, Swarbrick's *Robert Adam and His Brothers*, Hartshorne's *Recumbent Monumental Effigies in Northamptonshire*, Macquoid's *History of English Furniture*, Townsend's *Beautiful Buildings in France and Belgium*, Dietterlin's *Architectura von Ausstheilung, Symmetria und Proportion der fünf Seulen, etc.*, Malton's *Collection of Designs for Rural Retreats, etc.*, Taylor's *Modern Homesteads*, Ketchum's *Structural Engineers' Handbook*, Watson's *British and Foreign Marbles*, Champney's *Irish Ecclesiastical Architecture*, Bond's *Chancels of English Churches*, Batsford's *English Mural Monuments*, Lux's *Otto Wagner*, Maitland's *History of London*, Woodfall's *Law of Landlord and Tenant* (19th ed.), Pullan's *Designs of William Burges*, Watson's *The Double Choir of Glasgow Cathedral*, Weissman's *Geschiedenis der Nederlandsche Bouwkunst*, De Rance's *Water Supply of England and Wales, etc.*; [Whitelaw Memorial] *Designs in Architecture by James Mitchell Whitelaw*, Innocent's *Development of English Building Construction*, Meloy's *Theatres and Picture Houses*, Jaggard and Drury's *Architectural Building Construction*, Spencer's *Practical Design of Steel-framed Sheds*, Weiss' *Preservation of Structural Timber*, Browne's *The Ancient Cross Shafts at Bewcastle and Ruthwell*, Barbault's *Les Plus Beaux Monuments de Rome Ancienne*.

LIBRARY ATTENDANCES, 1916-17.

			Members.	Non-Members.	Total.				Members.	Non-Members.	Total.
1916.						Brought forward			523	572	1,095
April	...	...	84	111	195	October	...	...	138	73	211
May	...	...	101	137	238	November	...	...	126	83	209
June	...	...	108	138	246	December	...	...	95	60	155
July	...	...	112	116	228	January, 1917	...	...	92	58	150
August	...	...	Reference Library closed.			February	...	...	105	59	164
September	...	...	118	70	188	March	...	...	141	94	235
						Total			1,220	999	2,219

REPORT OF THE PRACTICE STANDING COMMITTEE.

Ten meetings have been held since the date of the last Report.

The officers who were elected at the beginning of the session 1915-1916 have remained in office during the session 1916-1917, in accordance with a resolution of the Committee and with the general action of the Institute as to its honorary officials. They are Mr. Max Clarke, Chairman; Mr. Edward Greenop, Vice-Chairman; Messrs. Matt. Garbutt and Alan E. Munby, Hon. Secretaries.

Death of the Vice-Chairman.—As this report was in preparation the Committee received news of the death of the Vice-Chairman, Mr. Edwd. Greenop, and they desire to put on record here their high appreciation of the services he has for so long rendered to the Committee, first in the office of Honorary Secretary and recently in that of Vice-Chairman, as well as their sincere regret for his loss and their sympathy with his relatives.

The War has not caused any diminution in the amount of work with which the Committee has to deal. Several members have made inquiries upon legal points arising out of conditions created by the political situation, and the Committee have been obliged to point out again that purely legal questions are not within their province. The following are some of the chief matters dealt with :—

Experts' Services and Architects' Charges in relation thereto.—The Sub-Committee appointed in July 1915 to consider this very important matter has concluded its work, and a Report has been submitted to the Committee.

Special Sub-Committees.—The Professional Conduct Sub-Committee and the Schedule of Charges Sub-Committee have been continued, and the former has disposed of several cases referred to it.

Clerks of Works.—Two questions relating to this official have been considered. The first was as to the effect upon the responsibility of the Architect of a client's refusal to appoint a Clerk of Works when such an appointment was recommended by the Architect ; upon this reports have been made to the Council. The second was raised by trade representatives, and had reference to the limitation of the duties of the Clerk of Works in connection with measuring up works ; reports have been made to the Council upon this also.

Professional Advertising.—There have been some further complaints upon this matter, the most important of which was made by the South Wales Institute of Architects ; reports have been made to the Council upon it.

Architectural Practice in India.—Through complaints as to alleged irregularities the Committee became aware that Architects in India hardly ever hold the independent position that is theirs in England, private practice being almost unknown. The Committee reported to the Council as to this. At a later period of the Session it was reported to the Committee that measures of investigation and alteration in the Indian Public Works Department have been foreshadowed in a speech by the Viceroy, and the Committee thereupon made further recommendations to the Council as to the position of the practice of architecture in India.

Deptford Borough Council and R.I.B.A. Conditions of Contract.—A complaint was received from this Council that the R.I.B.A. Conditions of Contract were so drawn up as to make it possible for the successful party in an arbitration case to be ordered to pay the costs of the unsuccessful party. It was explained to the Deptford Council that the possibility referred to arose under the Arbitration Act, which controlled procedure under the R.I.B.A. Conditions of Contract.

Appointment of Arbitrator.—The Form of Appointment of an Arbitrator, applicable to disputes not coming under the R.I.B.A. Conditions of Contract, has been reconsidered by the Committee, after submission to the Institute's solicitors, and finally approved.

Payments on account of Contract Sums.—A suggestion was received from a Trade Society that the amount of payment as work proceeds should be in all cases 90 per cent. and that the retention money between completion and the end of the agreed maintenance period should bear interest at 5 per cent. per annum. The Committee expressed the view that the amount for payment as work proceeds should be left open for arrangement between the parties, as at present, and that they did not agree to the desirability of paying interest on the retention money.

Conditions of Contract.—During the Session various points have been raised which have a bearing upon the work of the Special Committee now revising the Conditions of Contract, and these points have been referred to that Committee.

London Building Acts.—A report by the Art Standing Committee, containing suggestions for

amendments to the existing Acts, has been sent by the Council to the Committee for consideration. After careful discussion by a sub-committee a report has been made to the Council.

Members' Queries.—The Committee continue to receive questions that are not accompanied by information sufficient to enable answers to be given; and they would remind members and others that when one party makes a statement from which another interested party may dissent the Committee invariably observe the necessary rule of hearing both sides of the case. One communication from a member may be of more general interest than most. It had reference to a case in which a client contended that his architect's charges for work recently done should be based upon what the builder's prices would have been before the War!

REPORT OF THE SCIENCE STANDING COMMITTEE.

Since the date of the previous Report four meetings of the Committee have been held, with an average attendance of seven members. The Chairman, Mr. Bernard Dicksee, and the Vice-Chairman, Mr. W. E. Vernon Crompton, having acted for the latter part of the previous Session, were re-elected, and Mr. A. O. Collard and Mr. Digby L. Solomon were elected joint Hon. Secretaries. In recognition of his services to the Committee Mr. Hornblower was invited to become a Visiting Member, as the By-laws do not provide for the co-option of members by a Standing Committee.

Protection of Iron Drain-pipes.—In 1905 Messrs. Holland & Hannen laid some protected iron drain-pipes at their own expense, under the supervision of Messrs. Lewis Solomon, Max Clarke and Wm. Dunn. In 1909 Mr. Matt. Garbutt reported that the pipes were then practically unaffected. In consequence of an inquiry recently received from Mr. Searles-Wood on the subject, it was decided by the Committee to let the matter rest for another twelve months owing to labour shortage.

Sub-Committee on Scientific and Industrial Research.—The appointment of this Sub-Committee late in 1915, together with a brief summary of its work up till April 1916, were mentioned in last year's Report. Since then the Sub-Committee has been strengthened by the addition of further members, and its work has become of such importance that it has been appointed by the Council a full Committee, responsible direct to the Council, and with authority to represent the views of the Institute before the Privy Council Committee on Scientific and Industrial Research. A report of its proceedings will be found in another part of the Council's Annual Report.

Shell-discard Steel.—The Ministry of Munitions having made known the feasibility of using Shell-discard Steel in substitution for Mild Steel, the use of which, without licence, has been prohibited, the Committee have made some inquiries on the subject of its qualities for building construction, as compared with Mild Steel. Particulars have been forwarded to the Council with a view, if thought fit, to representations being made in the proper quarters to secure distinctive markings on all Shell-discard Steel when intended for constructional purposes.*

Further Symbols and Abbreviations.—A communication has been received from the Institution of Heating and Ventilating Engineers advocating the adoption of certain symbols and abbreviations in addition to those already in general use. The Committee regard these suggestions as part only of a large subject, and think they should be submitted to various other scientific societies, to prevent the risk of adoption of any sign that may already be in use with another meaning.

The Metric System.—A letter from an architect practising in Paris, addressed to the President, asking the R.I.B.A. to advocate the adoption of the Metric System in England, has been considered by the Committee, particularly with regard to the effect such a change would have upon the work of architects.

The Committee have been consulted by various correspondents on such matters as the Decay of Artificial Stonework and as to Underground Water Dams, and suitable replies have been sent in all

* The Council are in communication with the Engineering Standards Committee on the subject.—SECRETARY.

cases. The Sub-Committees on "Belfries and Vibrations" and on "Defective Roofing Tiles" have been reappointed.

REPORT OF THE TOWN PLANNING COMMITTEE.

Six meetings of the Committee and two joint meetings with other professional societies have been held. Sir Aston Webb was re-elected Chairman, Professor Beresford Pite Vice-Chairman, and Mr. W. R. Davidge Honorary Secretary.

The proposed arterial roads in Greater London were the subject of a conference of local authorities and professional societies on the 19th May 1916, when a resolution proposed by Sir Aston Webb, on behalf of the Institute, and seconded by Sir Alexander Stenning, was carried unanimously. A deputation from the conference waited on Mr. Walter Long, President of the Local Government Board, on the 31st October 1916, and the subject is now being further considered by Sir George Gibb, Chairman of the Road Board, to whom it was referred by Mr. Long. It is to be regretted that the Government have seen fit to close the London Traffic Branch of the Board of Trade, which, under Col. R. C. Hellard, had proved itself of the utmost value to London. The laying down of such arterial roads in and about many of our large centres will be a work of pressing national importance after the war, and the Institute is doing all in its power to further such proposals.

Arrangements have been made with the Allied Societies of the Royal Institute for co-operation in the representation of the architectural point of view at the various Local Government Board Inquiries into town planning schemes proposed by local authorities, and constant effort is being made both by the Institute and its Allied Societies to secure, if possible, the appointment of an architect to collaborate with the town officials in such schemes. A letter emphasizing the need for efficient architectural advice at the earliest stages of a scheme is sent out to all local authorities contemplating town planning or improvement schemes. The Committee are also in close touch with the Local Government Board in the matter, and early intimation is facilitated by a system of Press cuttings which the Council has recently inaugurated, at the suggestion of the Committee.

Much attention during the year has been given to the S.E. & C. Railway Company's proposals with reference to the proposed strengthening of Charing Cross Bridge, and a joint committee of the Institute and the London Society has been largely instrumental in drawing attention to the nature of these proposals. It will be remembered that the railway company last year submitted to Parliament a proposal for the construction of steel arched cantilevers and additional masonry piers under the eastern portion of the Charing Cross Railway Bridge at an estimated cost of some £167,000. The Bill having passed the Lords was rejected by the House of Commons; this Session it has again been introduced, and despite strenuous opposition has passed the stage of second reading and is now being considered by a Committee of the House. It is noteworthy, however, that the suggestion put forward on behalf of the Institute and the London Society, for a great Imperial Bridge carrying road traffic over the Thames at Charing Cross, has met with almost unanimous support from all parties both in the House and out, and it is hoped that the widespread public discussion on this great project may yet bear fruit. The Charing Cross Bridge Committee has held twelve meetings, and the special thanks of the Committee are due to the Rt. Hon. John Burns, M.P., who has been indefatigable in his public-spirited labour to secure a worthy public improvement for the metropolis of the Empire.

The proposal for a Thames Barrage has been further investigated, but in view of more pressing matters and the detailed investigation involved, the consideration of the subject has been adjourned for the present.

REPORT OF THE INDUSTRIAL RESEARCH COMMITTEE.

On the recent formation of a Privy Council Committee to encourage Industrial Research, the Royal Institute approached the Advisory Working Body of this Committee with an offer of sugges-

tions for researches desirable in connection with building materials. As a result a committee was appointed representing the Institute Council. This Committee has met the Government Committee, and in the course of numerous subsequent meetings of its own and further negotiations with the Government Committee and various institutions, a number of important problems have been put forward, and are in several cases under actual investigation. One of the most important subjects dealt with is that of timber in relation to decay and preservation, use of colonial woods, and afforestation. Through the medium of the Imperial College of Science, it is hoped that national attention may be called to the needs of investigating decay and preservation in a manner leading to the formation of an Institute for such work, while Indian and Colonial timbers are being studied by a special committee on which the R.I.B.A. is very strongly represented, and which now enjoys a Government grant for its researches.

On the decay and protection of metals, both ferrous and non-ferrous, the Committee have been placed in touch with the Iron and Steel Institute and the Institute of Metals, both of which bodies are courteously considering the problems of special interest to architects in their researches.

Other subjects under discussion are improvements of glass for pavement lights; defects in roofing and floor tiles, and durability of paints, which it is hoped will later receive attention.

The Committee has now extended its activities with a view to a recommendation to the Board of Architectural Education for further training in science.

Mr. Alan E. Munby [F.] is Chairman of the Committee, and Mr. Digby Solomon [A.] Hon. Secretary.

REPORT OF THE ARCHITECTS' WAR COMMITTEE.

On the outbreak of war a general meeting, open to all architects, was called by the President of the Royal Institute of British Architects, at which a committee was formed in order to raise money for the Prince of Wales's Fund as a united contribution from the profession; to offer to the Government the services of architects wishing to volunteer them; to assist architects about to join the Forces in carrying on their practices; to help financially (as far as possible through the medium of suitable employment) architects who were placed in temporary difficulties owing to the war; and to report in due course to the Council of the Royal Institute of British Architects. An Executive, and Employment and Selection Sub-Committees were immediately formed, and have been working ever since, these committees having held 156 meetings.

Through the generosity of individual donors and the Architects' Benevolent Society the sum of £260 has been sent by the War Committee to the Prince of Wales's War Relief Fund.

Careful lists were prepared of those seeking employment with their various qualifications, and representations were made both formally and through personal introductions to the Government and other departments likely to require such assistance, offering to suggest men for employment as they might be required. It soon became clear, however, that very few positions of an advisory character would be placed at the Committee's disposal. The number of offers of service received by the Selection Committee has been 1170, and the number of Government departments and other bodies which have applied for assistance has been 48. In all on about 968 occasions applicants have been either placed, or in some manner advised, or assisted in the utilisation of their professional qualifications, including cases put forward in more than one direction.

Though the scheme for assisting architects joining the Forces in carrying on their practices was widely circulated, and machinery created for its development, very few calls have been made for help in this direction.

Continuous assistance and advice have been given through the Professional Employment Committee to Architects financially embarrassed by the war, by employment upon reports, measured drawings, and similar useful work, while a very large proportion of the architects employed upon the

Government Civic Survey, which has its headquarters at the Royal Institute of British Architects, are applicants to the War Committee under this branch of its work. The number of applicants under these departments of the Committee's activities has been 502, and the number of occasions in which assistance has been rendered 389. Of the 115 employed on the Civic Survey included in the above numbers, 80 have since obtained more remunerative appointments, while 48 of these have been again further assisted.

The position of architects after the war has recently been receiving the careful consideration of a Sub-Committee which includes representatives of the Allied Societies and the Architectural Association.

The Government's National Service Scheme has naturally had its effect on the Committee's work, and on the suggestion of the Provincial Architectural Societies, a deputation from the War Committee has been received by Mr. Chamberlain, and an Advisory Council formed to assist in the best utilisation of the services of architects when they enrol. Everything so far done in this direction has already been published in the professional journals. The Committee take this opportunity of thanking its working Sub-Committees and their honorary officials for their valuable assistance.

REPORT OF THE HONORARY AUDITORS FOR 1916.

We have carefully examined the books and checked the various items therein with the accounts and vouchers for the year 1916. We have also examined the various share certificates held by the Institute, and the list of share certificates deposited at the Bank, all of which were found to be in order and to agree with the balance sheet prepared by the accountants.

In the rough estimate of the probable amount of income and expenditure submitted by the Council for the year 1916, the income was computed at £8,485, and the expenditure at £8,132, leaving a probable balance of £353. As will be seen by the balance sheet, the actual income was about £8,294, the expenditure about £7,882, and the balance £412. This result appears to be quite satisfactory, especially as the computed amount to be received from subscriptions and arrears was £7,300, whereas the amount received was about £253 less than this sum, mainly caused by the well-earned remission of fees to members serving in His Majesty's Forces.

In 1915 the fees received from candidates sitting at the examinations amounted to about £749, whilst in 1916 only £317 was received, but this reduction is to some extent made up by the smaller expenditure in examinations expenses—viz., a reduction of about £153.

In the Report of the Council for the year 1916-17 (see p. 185) the portion devoted to the question of finance shows at a glance the main items of income and expenditure for the years 1913 to 1916 inclusive. It will be seen that in many directions great economies have been effected, whilst in others increased expenditure has been found necessary owing to present conditions.

The grants made by the Council in 1915 were about £1,027 higher than in 1916, but a comparison with the balance sheets for these years will show that in the former year a large amount has been included as *per contra*, and also that many grants then made were for special objects, necessary only at that time.

Despite the fact that in almost every case the securities under the Trust Funds have depreciated in value, it is satisfactory to note that owing to the accumulation of interest the monetary value of the prizes which the Council may award in the future can be greatly increased.

We are of opinion that the Funds of the Institute have been carefully and judiciously administered, and that due economy has been practised wherever possible, without restricting the necessary outlays for effectively carrying out the objects of the R.I.B.A.

As heretofore, we find the books have been kept most carefully and systematically. Every help was afforded to us in our work as auditors, and we think the thanks of the members are due to those officials who have evidently worked with the best interests of the Institute at heart.

R. STEPHEN AYLING [F.]

ARTHUR W. SHEPPARD [A.]

Income and Expenditure Account of Ordinary Funds for the Year ended 31st December, 1916.

Dr.

EXPENDITURE.

To ORDINARY EXPENDITURE—

Rent

Rates and Taxes

Interest on Mortgage

Gas and Electric Lighting

Fuel

Salaries

General Printing, Stationery, Stamps, and
Petty Expenses

General Meetings and Exhibitions

Housekeeping and Wages

Advertisements

Examination Expenses

General Repairs

Fire Insurance

Grant to Architects' Benevolent Society

Grant to Architectural Association (Includ-
ing £240 received as per contract)

Grant to London Society (Charting Cross
Bill)

Grant to British School at Rome

Grant to A. A. Active Service Committee ..

Library

JOURNAL—

Reporting

Printing and Binding

Illustrations

Addressing, Postage, and Carriage

KALENDAR (Supplement)

Contributions to Allied Societies

War Committee

Civic Survey

MISCELLANEOUS EXPENSES—

Legal and Accountants

Presidents of Allied Societies

Telephone

President's Portrait

Aircraft Insurance

The late C. E. Mallows' Drawings

Sundries

Reserve for fine payable at renewal of
Lease

Interest on Overdraft

Balance of Income over Expenditure for
year included in Balance Sheet Surplus ..

£ s. d.

69 5 0

663 17 8

180 0 0

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Dr.		Balance Sheet of Ordinary Funds, 31st December, 1916.		Cr.	
LIABILITIES.		£	s. d.	ASSETS.	
To Sundry Creditors—				By Premises	£
Sundry	746 14 4			(Subject to a Mortgage of £4000 at 4 per cent.)	35622 7 2
Mortgage Interest	40 0 0			„ Debtors, Rent, Advertisements, &c...	405 0 0
Rent	17 5 0			„ Subscriptions in Arrear for 1916 and previously	1948 18 2
		803	19 4		
Reserve for fine payable on renewal of Lease		63	0 0		
Examination Fees anticipatory of election		81	18 0		
Subscriptions received in advance		81	2 0		
Bank Overdraft	1900 13 4				
Temporarily reduced by Grissell Legacy paid to Bank pending investment....	500 0 0	1400	13 4		
		500	0 0		
Lieutenant Francis Grissell Legacy Fund..					
Surplus of Assets over Liabilities (subject to Valuation of Premises and realization of Debtors and Subscriptions in Arrear)		35043	10 8		
		£37974	3 4		£37974 3 4

Revenue Accounts of Trust Funds for the Year ended 31st December 1916.

Dr.	£ s. d.	Cr.	£ s. d.
ASHPITEL PRIZE FUND :—		By Balance from last Account	7 11 8
To cost of Ashpitel Prize	10 0 0	By Dividend on £305 1s. 8d. New South Wales 4 per Cent. Debentures (1922)	9 3 6
To Balance carried forward	9 6 10	By Dividend on £76 8s. 11d. 4½ per Cent. War Loan	2 11 8
	<u>19 6 10</u>		<u>19 6 10</u>
ANDERSON AND WEBB FUND :—		By Balance from last Account	11 1 10
To purchase of £20 12s. 10d. 4½ per Cent. War Loan	20 0 0	By Dividend on £59 6s. New South Wales 4 per Cent. Inscribed Stock (1942)	2 6 6
To Balance carried forward	14 9 10	By Dividend on £594 18s. 4d. New South Wales 4 per Cent. Debentures (1922)	19 3 6
	<u>34 9 10</u>	By Dividend on £56 6s. 4d. 4½ per Cent. War Loan	1 18 0
			<u>34 9 10</u>
ARTHUR CATES LEGACY :—		By Balance from last Account	8 17 5
To purchase of £25 18s. 3d. 4½ per Cent. War Loan	25 0 0	By Dividends on £1160 4 per Cent. N.E. Railway Preference Stock	37 19 9
To Balance carried forward	26 10 2	By Dividend on £127 18s. 7d. 4½ per Cent. War Loan	4 13 0
	<u>51 10 2</u>		<u>51 10 2</u>
DONALDSON TESTIMONIAL FUND :—		By Balance from last Account	8 1 7
To Balance carried forward	4 13 10	By Dividend on £72 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock	1 3 11
	<u>4 13 10</u>	By Dividend on £12 4s. 7d. 4½ per Cent. War Loan	0 8 4
			<u>4 13 10</u>
DONATION FUND :—		By Balance from last Account	2 13 0
To Balance carried forward	5 4 6	By Dividend on £76 8s. 11d. 4½ per Cent. War Loan	2 11 6
	<u>5 4 6</u>		<u>5 4 6</u>
GODWIN BURSARY :—		By Balance from last Account	18 17 11
To amounts paid for Medal	1 11 6	By Dividend on £1070 Caledonian Railway 4 per Cent. Stock	32 10 4
To purchase of £10 6s. 6d. 4½ per Cent. War Loan	10 0 0	By Dividend on £44 8s. 4½ per Cent. War Loan	1 10 0
To purchase of 50 War Savings Certificates	38 15 0		<u>52 18 3</u>
To Balance carried forward	2 11 9		
	<u>52 18 3</u>		
GRISSELL LEGACY :—		By Balance from last Account	8 7 1
To Balance carried forward	15 15 1	By Dividend on £20 0s. 8d. "B" Annuity Great Indian Peninsula Railway	11 14 2
	<u>15 15 1</u>	By Dividend on £20 7s. 8d. 4½ per Cent. War Loan	0 13 10
			<u>15 15 1</u>
OWEN JONES STUDENTSHIP :—		By Balance from last Account	42 0 0
To purchase of £103 4s. 11d. 4½ per Cent. War Loan	100 0 0	By Dividend on £2128 Midland Railway 2½ per Cent. Debenture Stock	48 11 2
To purchase of 50 War Savings Certificates	38 15 0	By Dividend on £1247 G.W. Railway 5 per Cent. Consolidated Stock	51 1 0
To Balance carried forward	11 6 4	By Dividend on £393 16s. 8d. 4½ per Cent. War Loan	13 9 2
	<u>150 1 4</u>		<u>150 1 4</u>
PUGIN MEMORIAL FUND :—		By Balance from last Account	0 2 6
To purchase of £15 9s. 8d. 4½ per Cent. War Loan	15 0 0	By Dividend on £1070 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock	36 4 0
To Balance carried forward	21 17 0	By Dividend on £15 9s. 9d. 4½ per Cent. War Loan	0 10 6
	<u>36 17 0</u>		<u>36 17 0</u>
SAXON SNELL BEQUEST :—		By Balance from last Account	44 4 9
To purchase of £51 12s. 6d. 4½ per Cent. War Loan	50 0 0	By Dividend on £698 4s. New Zealand 3½ per Cent. Stock	19 4 10
To Balance carried forward	20 7 7	By Dividend on £204 10s. 4d. 4½ per Cent. War Loan	6 18 0
	<u>70 7 7</u>		<u>70 7 7</u>
TITE LEGACY FUND :—		By Balance from last Account	47 2 3
To purchase of £51 12s. 6d. 4½ per Cent. War Loan	50 0 0	By Dividend on £1150 2½ per Cent. Consols	22 13 0
To Balance carried forward	21 10 1	By Dividend on £51 12s. 6d. 4½ per Cent. War Loan	1 14 10
	<u>71 10 1</u>		<u>71 19 1</u>
WIMPERIS BEQUEST :—		By Balance from last Account	117 11 7
To purchase of £134 4s. 5d. 4½ per Cent. War Loan	130 0 0	By Dividend on £1024 18s. 8d. Metropolitan Water Board 3 per Cent. "B" Stock	24 11 6
To Balance carried forward	18 19 7	By Dividend £202 3s. 5d. 4½ per Cent. War Loan	0 16 6
	<u>£148 19 7</u>		<u>£148 19 7</u>
SAFFERY, SONS & CO.,			
Chartered Accountants.			

Examined with the vouchers and found to be correct. 12th April 1917. { R. STEPHEN AYLING [F.] } Hon. Auditors.
{ ARTHUR W. SHEPPARD [A.] }

£7500 0 0

HIPPOLYTE J. BLANC, ARCHITECT.

CONSIDERABLY more than half a century has come and gone since I first met Mr. Blanc at what was then known as the School of Design, Edinburgh, and from that date onwards we had lived in unbroken and intimate friendship, no cloud ever came between us: and I have always felt that while he lived I had a friend on whom I could rely, and my experience, as I know, is not a solitary one—he was ever kind and generous. The large attendance of his professional brethren at the service in Christ Church, Morningside (one of his designs), showed their appreciation of his worth as a fair and just man in his career as an architect, with as little of professional jealousy as is consistent with one who runs and wishes to win the race. I feel it due to his memory to say this much before proceeding further.

He was born in Edinburgh in 1844. His father, Victor Blanc, from Avignon, became a naturalised Scotchman about 1845, and passed the remainder of his life here; his mother was an Irish lady, but he always regarded himself as a Scotchman, and was proud of his old Heriot School, where he was Dux Medallist in 1859; and in late years he gifted to the school the very handsome sum of £500, and was the joint author of a well-illustrated historical and descriptive account of this institution. Probably the influence and charm of this old building kindled the interest which he afterwards took in mediæval architecture, and especially in that of Scotland. Nothing delighted him more than to head a large company of visitors over some ancient building, and he would take any amount of trouble to make the visit a success; consequently he was in great request amongst learned societies in this capacity.

Blanc served his apprenticeship with Mr. David Rhind, an architect of the Classical School, some of whose works—such as the Commercial Bank of Scotland, the Life Association Insurance Offices, in Princes Street, and Stewart's Hospital, all in Edinburgh—confer considerable distinction on his name. From this he passed in 1865 to H.M. Office of Works as first assistant, where he remained four years, when he commenced business on his own account. During these years he made himself very familiar with the important ancient buildings in Scotland, then under the care of the Crown. This was to him most congenial work, and when the opportunity came in 1885, by the munificence of Mr. William Nelson, to restore the Great Hall of Edinburgh Castle, Mr. Blanc was well qualified to carry out this great work. The Hall had been degraded almost beyond recognition, having been divided into three stories with numerous apartments on each. The work in a great measure consisted in clearing out all these obstructions—with the lath-and-plaster ceiling, which concealed from view the fine old oaken roof—and restoring the old windows, greatly knocked about, to their original form. The old fire-

place had been completely destroyed, and this the architect had to design, taking for his example the fine large fireplace in Borthwick Castle, near Edinburgh, and with conspicuous success. The colour scheme of the Hall he personally worked out on a large scale drawing. I remember seeing him engaged on these. The first sight of this Hall was quite a revelation to visitors to the Castle, as its very existence had been almost forgotten. (Its dimensions are 84 feet in length by 30 feet in breadth and height.) He, at the same time, added the top story to the Argyll Tower. This was done in ashlar work, roof as well as walls, so as to discriminate the new work from the old rough masonry. I may here give an instance of the thoroughness of his survey of the Castle. When the remains of the Great Tower, built by David II. in the fourteenth century, and knocked down in the siege of 1573, were discovered a few years ago, it stands to the credit of Blanc that many years before this he had pointed out in the *Transactions* of the Architectural Association the exact position of the tower, and indicated certain buildings, then in use, as part of the same. This information only came to light after the ruins had been cleared out. On a late visit of the Association to the Castle I had the pleasure of relating this story in Blanc's presence, which naturally gratified him.

Blanc was ambitious, a tireless worker, and rose rapidly in public estimation as an architect, so that work flowed in to him which might have satisfied a less aspiring man, but not so with him; he boldly entered the field of battle and engaged in competitions great and small, public and private, and, to the advancement of his reputation, he very often came out first. He was a skilful draughtsman, and knew well the art of showing his designs to the best advantage; as I have already said, he always intended to win.

There is a tide in the affairs of men, and with Blanc it was running high when he gained the competition for the Thomas Coats' Memorial Church, Paisley, in 1885. It belongs to the Baptist Denomination, and having seen the various designs submitted I think it not unlikely that if the decision had been left with the competitors with two votes each the result would have been what it was. This is his most important work, and Scottish readers especially will appreciate its scale when they know that it covers an area of about the same as the following mediæval cathedrals and churches—viz., the Cathedrals of Dunkeld or Kirkwall, or the parish church of Haddington, and is slightly larger than the churches of Linlithgow or Stirling. It stands on ground rising up from the roadway with a great flight of some thirty steps, 50 feet wide, the striking effect of which can easily be supposed. At the top of the steps from a broad landing three entrance doorways lead into a stone vaulted vestibule, terminating at each end in semi-octagons, which are carried up as turrets flanking each side of the front gable. The nave of five bays with side

aisles is 68 feet long by 57 feet wide within the walls, by 57 feet high to the arched timber roof. The arcade pillars are moulded with carved capitals; the arches rise to a clear height of 22 feet; above this is the clear-story wall with windows of two lights, with simple tracery, enclosed by a wide pointed arch; the aisle windows are somewhat similar. Each gable contains a large traceried window. The crossing beneath the tower, not quite square, which measures about 40 by 30 feet, is groin vaulted with numerous ribs at a height of about 50 feet. The walls of the chancel and transepts continue of the same height and design as the nave. Owing to the rapid rise of the ground, and the desire to keep the floor of the church above the same, there is an under-story, where is a spacious hall with pillars on which those of the nave stand. As a result of this the sides, on the exterior, are seen to be of two stories with buttresses between the bays, from these flying buttresses support the clear-story walls. The central tower is 35 feet in breadth and rises to a height of 182 feet above the nave floor. It is finished with an open crown of eight arches, supporting at their junction a lantern pinnacle after the manner of St. Giles's, Edinburgh, and rather exceeding it in size; all the other crown towers at Aberdeen, Linlithgow, Glasgow, Newcastle, St. Dunstan's, London, being supported on four arches. There will doubtless be differences of opinion amongst architects regarding this church; there is probably too much small detail about it, destroying the effect of quite unadorned masonry—the knowing of exactly when to stop—a fault which besets most of the architects of the day. Still, after all is said and sung, it will, as is to be hoped, stand for centuries as a great Memorial church.

Before this church was begun Blanc had completed a church in Paisley (St. James's), for an entirely different ecclesiastical denomination, and it is quite possible that the effect of this rather important first building was not without its influence on the proprietors of the Coats' Memorial.

He was architect of a large number of churches throughout Scotland, many of them considerably important in size, scale of enrichment, and costliness. It would be wearisome to enumerate a mere string of names at any length without sketches, but a few may be referred to. There is St. Cuthbert's, Christ Church, Mayfield, St. Matthew's, West Port, all in Edinburgh; others, such as Troon Parish Church, All Souls' Church, Invergowrie, St. Luke's, Broughty Ferry, Middle Church, Perth, and at Broxburn and Greenock. At probably most of them he had things very much his own way, and, as a matter of course, there is a certain likeness running through them all, or, in other words, he had his own signature. The first mentioned in the list, and perhaps best known, is an exception, and may be briefly referred to.

St. Cuthbert's Church, beneath the north-west side of the rock of Edinburgh Castle, occupies a conspicuous position at the west end of Princes Street

Gardens. The old barn-looking structure was taken down, but its dimensions had to be adhered to in the new building, which had to be crowded with galleries and pews to keep up a certain amount of sittings; also the tower and spire dating from the eighteenth century was retained: so the architect had not quite a free hand. The alteration of the exterior with its two flanking turrets at the east, end with circular apse between and simple pilasters along the walls, these, with the old tower, make up a dignified composition. The interior, owing to some of the above-noted restrictions, is not so satisfactory from an ecclesiastical point of view. The old tower, in this instance, dictated the style of architecture, and, so far as I remember, it is the only instance of any consequence (except a Free Church at Morningside) where he deviated from the Gothic style.

Besides churches Mr. Blanc had a very wide experience in designing buildings for very various purposes, such as mansions, cottages, villas, street architecture, club-houses, farm-steadings, breweries, halls for various purposes, banks, libraries, schools, monuments, and what not. Perhaps the most important of these, as combining something of them all, was the Bangour Village Asylum,* situated some fifteen miles to the west of Edinburgh, and gained by competition. It was decided that this should not be one large single building, but a segregated series of buildings, planted on an area of 150 acres. There are from thirty to forty detached buildings, including many wards for patients of different classes and stages of treatment, residences for all the various officials and servants, private patients, dining-rooms, recreation-rooms, administrative quarters, power stations, schools, churches, stables, and so on. These are scattered about in a narrow valley through which a burn flows. The whole scheme with roads cost about £237,000. It will be readily seen that the carrying out of such an undertaking required no small amount of experience and knowledge.

Of his street designs reference may be made to the New Café, Princes Street, and No. 60 in the same division, and to the Ladies' College in Queen Street, for the Merchant Company. Only the eastern part of this has been erected, and it was about the last important work of his life. It was evidently designed to present a front to the street in harmony with the large building on the opposite side. In partnership with his son, Mr. Frank Ed. B. Blanc, he also designed a restaurant and block of offices in Coventry Street, London, costing about £30,000.

He was architect for several mansion houses, that for Sir Thomas Glen Coats, near Paisley, being perhaps the most conspicuous. It is an exceedingly picturesque house in the style of the kind of mansion so frequent in Scotland in the sixteenth and seventeenth centuries, and adapted to suit the requirements

* Described in a Paper read before the Institute by Mr. Blanc, and published in the JOURNAL for 21st March 1908.

of modern times. As a smaller type of house I might refer to Warrender Lodge, in the suburbs of Edinburgh.

He designed many memorials of a private and public kind. Of the latter that to King Alexander III. at Kinghorn, on a rocky cliff where the monarch met his death in 1286, is in the style of some of the simpler Eleanor Crosses, and must be well known to many from the passing sight of it from the railway.

Mr. Blanc was not a political man, but in all public affairs connected with art he was prominent. He was appointed Deputy President and Treasurer of the Royal Scottish Academy in 1907, and was a constant exhibitor there and a frequent one at the Royal Academy, London, the Salon, and other exhibitions. He was thrice President of the Edinburgh Architectural Association, the last time in 1907, during the visit of the R.I.B.A.; to the success of that visit he greatly contributed. He became a Fellow of the Institute in 1901 and frequently served as a Member of Council. His interest in the Association, almost from its inception, never ceased, and probably it owes as much to him as to any other member. He was President of the Photographic Society, and was a member of the Art Committee of many of the great exhibitions both in this country and abroad. He was one of the promoters of the School of Applied Art, and found time to write many essays and deliver lectures on subjects connected with architecture, especially in connection with the mediæval churches.

Every summer he took his office staff, which was sometimes fairly large, with a few friends, for a day's excursion in the country, selecting some historic abbey or castle as the site for the day; there must be many who remember his hospitality with pleasure on these occasions.

THOMAS ROSS, LL.D., F.S.A.Scot.

THE CARE OF ANCIENT MONUMENTS.

An important contribution to this subject was made by Mr. C. R. Peers, F.S.A., Chief Inspector of Ancient Monuments to H.M. Office of Works, in a paper read before the Concrete Institute on 25th January, 1917. The lecture, illustrated by lantern slides, was mainly a review of some important works of repair recently carried out by the Ancient Monuments Department, and was supplemented by brief descriptions of the more special processes which each building required. The subjects ranged from prehistoric stone structures to late Mediæval buildings. The work of H.M. Office of Works must be commended for its thoroughness and for its special study of the subject of repair. This country is fortunate in possessing a Department with such qualifications. It is flexible and restrained, shaping its activities to the particular character and requirements of each work placed in its charge. In this respect we appear to be avoiding the "wholesale" methods of the Continental Departments and their somewhat harsh results.

Herein lies a danger into which our own Government Office may fall. It has, perhaps, the tendency of all Departments to be searching and complete; to repair plentifully, even to the extent of anticipating defects and avoiding a return to the work—at any rate, during the life of the prevailing Government. This tendency is perhaps exemplified in the repair of the Norman Priory of St. Botolph at Colchester.

These ruins have been entirely repointed, giving a sense of uniformity and harshness to the whole—two characteristics foreign to the feeling of such works. This effect may be the result of the working of an official organisation; if so, it destroys one of the chief aims of the Department. It must in justice, however, be said that this example appears to be exceptional, and that so long as the direction of these matters is in the able hands of Mr. Peers, the ancient works in this country in Government control are in no risk of losing their beauty or their individuality.

The lecturer made no direct appeal to the special work of the members of the Concrete Institute, but much information, both from the paper and from the subsequent discussion, afforded opportunities for reflection upon the treatment of the modern structures with which the members of that Institute are mainly concerned.

Buildings have become ancient in direct proportion to the skill by which they were originally constructed and subsequently maintained. Students of these surviving works know that, of all the materials employed, iron is not only the least durable, but is invariably destructive of other materials in contact with it.

It would appear, however, that the modern architect or builder buries his head in the sand and carries on with anything in the form of building material that comes most readily to hand. Hence it is that a great English Cathedral now undergoing repair, in which the iron reinforcement of 200 years standing is being replaced by non-rustable metals, is actually having some hollow-boarded floors replaced by concrete reinforced by a generous use of steel bars. Mr. Peers refers to the use of steel rods in the repair of "rubble-cored and ashlar-faced" walls at Jedburgh Abbey, founded in A.D. 1118. After 900 years' existence repairs are made, but it cannot be contended that these repairs possess the powers of durability which the elimination of or the use of another metal would otherwise have secured.

One may be permitted to make comments of this kind, seeing that the basis of the care or repair of ancient structures is durability.

Great destruction has befallen historic buildings in the war areas. After the rebuilding of the houses and workshops of the people will come the reinstatement of the churches, mansions and other places of historic interest. Time and care are especially required for these latter problems, and it is earnestly to be hoped that when the welcome opportunity arrives none but the most sympathetic methods will be employed. The

suspension of permanent repairs in this country renders old structures liable to further injury; the study of temporary repairs, therefore, becomes increasingly important.

Amongst other valuable generalisations on the subject made by Mr. Peers, the following is noteworthy: "Our claim to be a generation which values its inheritance of history must rest on our employment of all the means which are at our disposal for the preservation of that inheritance." The lecture concluded with a word as to the future: "But of all the lessons the war has taught us, the greatest, perhaps, is that we should be well prepared for our future tasks, whatever they may be, and the making good of the losses inflicted on the historical monuments of the world will not be the least of such tasks."

W. A. FORSYTH [F.].

CORRESPONDENCE.

"Architecture and Civilisation."

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Referring to my remarks at the first conference [JOURNAL, February 1917], following Professor Lethaby's paper on the deplorable condition of the London streets, I mentioned that one of the finest approaches to the City from the river was in danger of being spoiled by the erection of a high building. My ideas were based on reports in the public Press. Since then I have made an investigation of the facts and have ascertained that no building can be erected on the site in question unless the plans are approved by the authorities.

A. E. RICHARDSON [F.].

Books Received.

- The Collegiate Church of Ottery St. Mary, being the Ordinacio et Statuta Ecclesie Sancte Marie de Ottery Exon. Diocesis, A.D. 1333, 1339. Edited from the Exeter Chapter MS. 3521 and the Winchester Cartulary, Vol. I., pt. II., pp. 98-114, with Plans, Photographs, Introduction and Notes. By John Neale Dalton, M.A., F.S.A., Canon of Windsor. 40. Cambridge, 1917. 25s. net. [Cambridge University Press.]
- The Practical Book of Architecture. By C. Matlack Price. With 255 illustrations. Sm. 40. Philadelphia and London, 1916. 52s. [J. B. Lippincott Company, 16 John Street, Adelphi.]
- Town Planning in Lucknow. A Report to the Municipal Council, by Professor Geddes. Fo. Lucknow, 1916. [Murray's London Printing Press, Lucknow.]
- Annual Report on Architectural Work in India, 1915-16. By the Consulting Architect to the Government of India. Fo. Calcutta, 1916. [Superintendent Government Printing, India.]
- Report on Oporto. By Barry Parker, F.R.I.B.A. Fo. Letchworth, 1916. [Garden City Press, Limited.]
- The Octagon (Dr. William Thornton, Architect). Portfolio of Drawings and Text made under direction of Glenn Brown, M.A., F.A.I.A., for the American Institute of Architects. Fo. Washington, 1916. [The Octagon, Washington, D.C.]
- Exposition de l'Architecture Régionale dans les Provinces envahies, Jan.-Fév. 1917. Organisée par le Sous-Secrétaire d'Etat des Beaux-Arts et la Société des Architectes diplômés par le Gouvernement. Catalogue. 40. Paris. [Galerie Goupil et Cie, 15 rue de la Ville-l'Évêque, Paris.]
- Bench Ends in English Churches. By J. Charles Cox, LL.D., F.S.A. With 164 illustrations. 80. Lond., 1916. 7s. 6d. net. [Oxford University Press.]
- Architecture and Sculpture in Mysore. No. I. The Kesava Temple at Somanthapur. [Mysore Archaeological Series.] By Rao Bahadur R. Narasimhaiah, M.A., M.B.A.S. 40. Bangalore, 1917. 3s. net. [Government Book Depot, Bangalore.]
- The Town Plan and the House. By F. Longstreth Thompson and Ernest G. Allen. Pamph. 40. 1s. 6d. [Garden Cities and Town Planning Association, 3 Gray's Inn Place, W.C.]



9 CONDUIT STREET, LONDON, W., 21st April 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-second List.

Fallen in the War.

PAPWORTH, Second Lieut. ALFRED WYATT [A.], Royal Engineers. Reported killed in list published 11th April.

PYWELL, Private WILLIAM JACKSON [A.], Honourable Artillery Company. Killed in action in France on 8th February. Aged thirty-two. He was the eldest son of Councillor W. Pywell [F.], Chairman of the Hanwell District Council.

Private Pywell, who was elected an Associate of the Institute in 1911, was engaged at the Office of Works, and volunteered for service early in 1915. To mark their appreciation of his patriotic spirit his colleagues at the Office of Works presented him with a valuable luminous wrist watch, which he carried with him to the Front.

Members' Sons Killed.

GLEAVE, Captain HAROLD MASON, Sherwood Foresters. Killed (struck by a shell whilst returning from action) in France on 6th March. He was the only son of Mr. William R. Gleave [A.], of Nottingham.

The following were the three sons of Mr. George J. Frisch, of Littlehampton, for thirty-five years an Associate of the Institute, and recently resigned:

FRISCH, Second Lieut. CHARLES, Gurkha Rifles. Killed in action, Mesopotamia, 17th April 1916.

FRISCH, Lance-Corporal GEOFFREY, Royal Sussex. Missing somewhere in France, presumed to be dead 25th January 1915.

FRISCH, Second Lieut. MAURICE, Rifle Brigade. Missing somewhere in France, presumed to be dead 25th August 1916.

Distinguished Service.

RUSSELL, Second Lieut. ROBERT TOR, I.A.R.O., attached Gurkha Rifles, and serving in Mesopotamia, has been awarded the D.S.O. He was wounded at the crossing of the Tigris at Shumran, but is now discharged from hospital and returned to duty. Second Lieut. Russell is son of Mr. S. Bridgman Russell [F.].

ROGERS, Second Lieut. WILLIAM HERBERT, R.E., mentioned in Dispatches for distinguished service (Times, 31st March).

Serving with the Forces.

The following is the Forty-Second List of Members, Licentiates and Students R.I.B.A. serving with the Forces, the total to date being 69 Fellows, 512 Associates, 315 Licentiates, and 294 Students:—

ASSOCIATES.

Belfrage, J. H.: 2nd Lieut. A.S.C.
Black, Herbert (of Melbourne): R.E. (Australian Force).

LICENTIATES.

Blackett, W. A. M. (President of the Victorian Institute of Architects): R.E. (Australian Force).
Fletcher, E. G.: 2nd Lieut., Durham Light Infantry.
Venning, H. R.: Lance-Corporal, R.E.
Ward, W. H., jun.: Major R.F.A. (has been serving since 4th August 1914).

STUDENTS.

Cash, H. W.: Suffolk Regiment.
Gray, Andrew: Norfolk Regiment.
Roberts, Kenneth M.: London Electrical Engineers.

Promotions, Appointments, &c.

Corlette, Major Hubert C. [F.], King Edward's Horse, Special Reserve Cavalry (King's Oversea Dominions Regiment), was appointed last November Chief Recruiting Staff Officer, 9th R.D., R.A. (Headquarters, Norwich).
Howitt, Captain T. C. [A.], has been promoted Major, Leicestershire Regiment.

Appeal to Members by the Lord Mayor.

The President commends to the attention of members the following letter addressed to him from the Mansion House, 23rd March 1917:—

"DEAR SIR,—I have received a request from the Chancellor of the Exchequer that the Metropolitan Committee which was formed for the purposes of the War Loan should be continued in order to stimulate the War Savings movement. At my invitation the civic representatives in the Greater London area met recently at the Mansion House to consider the Chancellor's request, and it was unanimously decided to continue the Committee for this purpose. An Executive Committee has been appointed to prepare and carry out a scheme which will be put into operation at the earliest possible moment.

"One of the directions in which I am of opinion this Committee can most effectively operate is in the setting up of a panel of speakers who are competent to give short addresses on the need for War Savings, and who will be able to spare a few hours every now and then in different parts of our area. This would not necessarily entail a fixed number of hours of work on given days, but it would be of the utmost assistance to be able to supply speakers at a few days' notice for the Campaigns which it is proposed to carry out.

"Many members of your Institute rendered very valuable service in connection with the War Loan Campaign, and this fact emboldens me once more to ask if you would bring this appeal to their notice, with a request that as many who are living or working in the Greater London area who feel that they could occasionally spare even a little time to help us would communicate with the Honorary Secretary (Mr. A. F. May) at this address, stating as near as they can what assistance they think they could render.

"It is suggested that when the panel is formed the

voluntary helpers will be called together in order to give an explanation of the methods which it is desired may be uniformly followed by all speakers.

"I am confident that you and the members of your Institute fully appreciate the great urgency and importance attaching to the rapid growth of the War Savings movement, which will tend to relieve the financial economic strain of the War.—Yours very truly,

"W. H. DUNN, Lord Mayor."

Unauthorised Assumption of Royal Arms.

The Council have given instructions for the publication of the following letter addressed to the Secretary:—

"The Royal Warrant Holders' Association,
8 Hanover Square, W., 7th March 1917.

"DEAR SIR,—At a meeting of the Committee of this Association held yesterday its attention was drawn to the fact that the Royal Arms are being incorporated in various buildings, such as hotels, &c., without authority for such use, and I was directed to ask if you would be kind enough to notify the members of your Institute that it is improper and illegal to incorporate the Royal Arms as part of a building that is being erected without authority for such use. I am also desired to ask if you will notify your members that the Royal Arms should never be included in any design or scheme that is being prepared unless such person or firm is entitled to use the Royal Arms by authority from His Majesty the King in connection with a particular business.

"The outcome of this letter is caused by a case recently dealt with by this Association, in which the Royal Arms were incorporated in a building in the West End of London, and the proprietor of the building in question was not entitled to use the Royal Arms in connection with his business.

"I enclose Section of the Act of Parliament dealing with the subject under discussion.—Yours faithfully,

"JAMES W. COLEMAN, Secretary."

The London Survey Committee.

The London Survey Committee issue the following appeal:—

"The prolongation of the war, and the temporary withdrawal, in consequence, of the financial help which the London County Council has hitherto given under its agreement with the Survey Committee, makes the present year a critical one. The urgent need for the continuance of our survey work is proved by the unfortunately increasing evidence that the destruction of ancient buildings in Greater London has not been stayed even by the war.

"Boswell's house in Great Queen Street, the last relic of a fine seventeenth century street of buildings, has already fallen; a row of early eighteenth century houses in Old Queen Street, Westminster, is being demolished; Bolingbroke House, Battersea, with its many beautiful internal features, is to be pulled down shortly; Eastbury Manor House, Barking, one of the finest of the Tudor houses in the country, is threatened with destruction; and an almost incredible proposal has been put forward by the Corn Exchange who, for the purpose of extending their premises, are seeking Parliamentary powers to obtain a site which includes

the Church of St. Olave, Hart Street, a mediæval church of great beauty, associated with the name of Pepys, the diarist, who is buried there, and one of the few City churches that escaped the Great Fire of London.

"The Committee feels that among the many great issues in the present war, the conflict with the spirit of vandalism which is inflicting such severe losses on Belgium and France is not the least; and it feels bound to make every effort to remove the reproach which attaches to the thoughtless action of those who imperil our own national monuments. If it were not that our supporters are enthusiasts in the cause for which the Committee has always striven we should not venture to make the present appeal, but we are confident that the case has only to be put before them to obtain an instant response.

"The fate of Eastbury Manor House is the subject more particularly requiring our immediate attention. The owner has agreed to leave the house standing, pending some scheme for its preservation. The Committee has procured complete and valuable pictorial records of the building, and is desirous of publishing without delay a monograph which shall give the requisite publicity to its remarkable beauty and historic value. To this end we appeal to all who would help in our work to send us their donations, however small. Twenty-four donations of £5 each would provide the necessary funds. Subscriptions should be sent to Mr. W. H. Godfrey, Acting Secretary, London Survey Committee, 27 Abingdon Street, S.W. 1."

University of London War List.

The Vice-Chancellor of the University of London will be glad to receive the following information with regard to members of the University who have served or are serving in His Majesty's Forces:—

Name (Christian Names in full).
College and University Career.
Rank and Regiment or Other Unit.
Particulars of Service (including War Distinctions, and whether wounded, retired, or fallen), with Dates.

Replies should be addressed to University of London War List, South Kensington, S.W.

NOTICES.

Annual General Meeting, 7th May.

The ANNUAL GENERAL MEETING of the Royal Institute will be held Monday, 7th May 1917, at 5.30 p.m. precisely, for the following purposes:—

To read the Minutes of the Special and Business General Meetings held Monday, 5th March 1917; formally to admit members attending for the first time.

To consider the Annual Report of the Council for the official year 1916-17 (printed on foregoing pages, and copies of which will be available at the Meeting).

Election of Members, 11th June 1917.

In accordance with the provisions of By-law 8, the names and addresses of the following applicants for membership are published for the information of members. Notice of any objection or other communication respecting them must be sent to the Secretary R.I.B.A. for submission to the Council prior to Monday, 21st May:—

AS FELLOWS (5).

BENWELL: JOHN WAYLAND [A.]; 28 Lowther Street, Carlisle; 11 Warwick Square, Carlisle.

Proposers: Geo. Dale Oliver, J. H. Martindale, Courtenay M. Crickmer.

FRASER: PERCIVAL MAURICE [A.]; 11 New Court, Lincoln's Inn, W.C.; South Logan, Devonshire Road, Sutton, Surrey.

Proposers: H. D. Searles-Wood, W. Henry White, Max Clarke.

HEALEY: ALFRED JOHN [A.]; 71 Marlborough Mansions, Cannon Hill, Hampstead, N.W.

Proposers: Fred. W. Hunt, W. Henry White, Arthur Ashbridge.

HEATHCOTE: ERNEST GREGG [Licentiate; passed the Examination qualifying for candidature as Fellow]; 110 Cannon Street, E.C., and Lloyds Bank Buildings, King Street, Manchester.

Proposers: Percivall Currey, J. W. Beaumont, Paul Ogden.

SPAIN: Colonel ALFRED, V.D. [A.]; Royal Insurance Buildings, 16 Spring Street, Sydney, N.S.W.

Proposers: John Sulman, Harry C. Kent, Timothy Honnor, Sir Aston Webb.

AS ASSOCIATES (4).

HAMILTON: ANDREW BLAYNEY; "Doubank," The Terrace, Wellington, N.Z.

Proposers: A. R. Jemmett, Robert Atkinson, H. V. Lancaster.

KEELEY: CECIL JOHN HARVEY; Home Affairs Department, Collins Street, Melbourne.

Proposers: Geo. C. Inskip and the Council.

RIDLEY: Captain BASIL WHITE; St. Wilfrid's, East Grinstead, Sussex.

Proposers: W. D. Caröe, H. Edmund Mathews, and the Council.

WIGHTMAN: THOMAS BLAIR MONCRIEFF; Queen Street, Brisbane, Australia.

Proposers: John Thomson, Wm. B. Whitie, John Watson.

AS HONORARY ASSOCIATE.

PENNELL: JOSEPH; Hon. Member American Institute of Architects, etc.; 3 Adelphi Terrace House, Robert Street, Strand, W.C.

Proposers: Ernest Newton, A.R.A., Sir Aston Webb, R.A., Herbert W. Wills.

Informal Conferences, 2nd and 16th May, at 3.30.

May 2.—"Education of the Architect" (adjourned from 21st February).—Opener, Mr. Harry Wilson; Chairman, Professor W. R. Lethaby [F.].

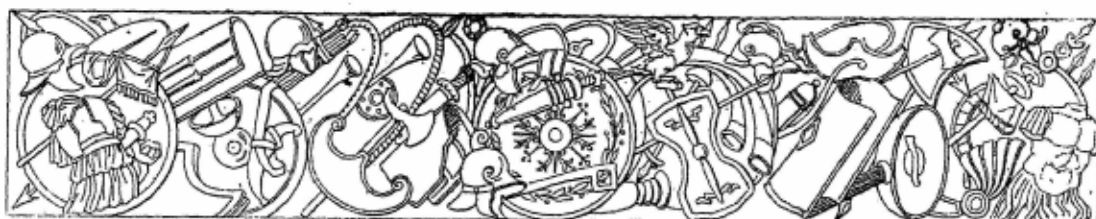
May 16.—"Co-operation in Design."—Opener, Mr. A. R. Jemmett [F.].

Licentiatees and the Fellowship.

The next Examination of Licentiatees desiring to qualify for candidature as Fellows will take place in July. Applications for admission must be sent to the Secretary before the end of May.

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THE EDUCATION OF THE ARCHITECT.*

Discussion at the Third Informal Conference held at the Royal Institute of British Architects, 21st February, 1917

Mr. H. V. LANCHESTER [F.] in the Chair.

THE CHAIRMAN: I imagine that you will agree with me in the view that at these informal conferences we shall be best employing our time, not in endeavouring to draft resolutions nor in framing a definite policy, but rather in eliciting ideas on the matter in hand and thus providing data for those, both within our Institute and outside it, whose qualifications impose on them the task of remodelling and amplifying existing procedure in such manner as the views expressed may suggest as desirable.

Before calling on Mr. Richardson, who is to open the discussion to-day, I should like to make a few remarks on the earlier phases of an architect's education. With regard to the later ones I am so largely in agreement with Mr. Robert Atkinson's Paper, read at the last meeting, that I will not take you over the ground he has covered.

In one sense the education of the architect cannot begin too early. It has been claimed that the faculty of observation essential in every branch of art must be encouraged as soon as it appears. It frequently is, only to be smothered by ill-devised educational methods at a later stage. The appreciation and comprehension of the facts by which we are surrounded, and their relationship measured in time and space, is the true object of education, and the observation necessary to acquire this should be in play throughout. Book studies are only useful in so far as they facilitate and quicken this. The substitution of book studies for the actual factors of life is disastrous to mental development, but this is too often the effect of the conventional type of education. Of course, specialised training may come comparatively late, but if the previous instruction has been on sound lines not only will the special studies be more easily assimilated but the bent of mind will be much more obvious when it comes to the choice of an occupation. Apart from the cases when a youth is for extraneous reasons drawn into a profession for which he is unsuited there are far too many in which this occurs through lack of the means of knowing what his natural qualifications are, these having been obscured by a false system of education.

Educationalists have begun to realise the deficiencies

of the methods still too general and to grasp the fact that where learning is a drudgery the method of imparting it is to blame. Real education, adapted to the age of the pupil, is always interesting to him, and as he advances he is most anxious to arrive at the point at which he is taking part in useful work. This point need not be postponed until the definite adoption of a life occupation. The advocates of Regional Survey have shown that many useful things can be done in school, while the Boy Scout movement owes its growth to a popular rendering of the same ideal. Such a programme introduces contacts with life and work which are of the greatest value in developing initiative and in encouraging a point of view, so that the young no longer feel their future careers to be things remote and apart from the educational stage of life. They know more of the world at large and are better prepared to assist in the choice of their future work.

I am indebted to Professor Fleure for the suggestion that there should be a period of State service according to capacity, on no account necessarily military, in order that the functions of citizenship, in its broadest sense, should be appreciated. Whether this be practicable or not, in some way or other the sense of communal life as qualifying individual aggrandisement should be acquired. In regard to this, the altruistic aspect, one must not be thought to undervalue the teachings of religion when one affirms that they have not, as a rule, been able to dominate social relationships.

To pass from the general to the particular—namely, the consideration of our profession and its educational needs—much as one would like to assume as a basis the type of preparatory education previously hinted at, this is at the present moment so rare that such an assumption will detract from the utility of our proposals. It is only practicable to start from the existing average, noting by the way the broader variations in antecedent training. Now this antecedent training usually falls short in affording no real knowledge of life and its realities, both material and social, so that professional education must endeavour to supply these deficiencies.

Knowledge of actual and material conditions, as the simpler of these two aspects, comes earliest, and

* See, for report of the first Conference on this subject, JOURNAL R.I.B.A. for March.

some of our technical schools deal fairly comprehensively with this, though there are still many districts where such preliminary training is inadequately provided for; while our examinations are deplorably defective as tests of this kind of knowledge. I am not exaggerating when I say that it might be possible to pass the Institute Examinations without being able to distinguish between a lump of lime and a piece of plaster, or a malleable casting and a wrought scroll.

When we come to the question of design as an aspect of social economy the business becomes more difficult. The factors that influence the standard of beauty, a complex of traditional method and logical expression, are not easily balanced, and even our leading schools of thought are not altogether at one. Then again, even among the best architects but a few are capable of imparting the skill they possess in a comprehensible way, and it follows, therefore, that the ultimate point at which knowledge can be imparted will only be reached by a proportion of those who have qualified to join the ranks of the profession. Briefly, out of the many legitimately engaged in architectural work, the architects will always be few.

Thus we see the necessity for a grading of the schools where studies leading up to architectural practice are dealt with. The principle of classification in schools is generally recognised, but the duty is imposed on us of examining the credentials of all schools where architecture is taught and of deciding to what stage they are competent to bring their pupils. If necessary we could advise such schools as to how they may best raise their standard of qualification. At the same time it is also incumbent on us to study our own examination with a view to bringing it into accord with the general principles we lay down, bearing in mind that there are aspects with which the ordinary forms of examination cannot adequately deal.

MR. A. E. RICHARDSON [F.] read the following Paper:—

In opening my Paper with two extracts from the correspondence of Lord Chesterfield to his son, when the latter was making the grand tour in Italy, a two-fold purpose is held in view having a bearing on my subsequent remarks. The first is from a letter dated London, July 30th, 1749. It reads:

Your time is, now particularly, inestimable; and every hour of it, at present, worth more than a year will be to you twenty years hence. You are now laying the foundation of your future character and fortune; and one single stone wanting in that foundation is of more consequence than fifty in the superstructure; which can always be mended and embellished if the foundation is solid. To carry on the metaphor of building: I would wish you to be a Corinthian edifice, upon a Tuscan foundation; the latter having the utmost strength and solidity to support, and the former all possible ornaments to decorate. The Tuscan column is coarse, clumsy and unpleasant; nobody looks at it twice; the Corinthian fluted column is beautiful and attractive; but, without a solid foundation, can hardly be seen twice, because it must soon tumble down.

The contempt in which the practical side of archi-

ture was held by the amateur in those days is shown in these lines.

It would not be amiss, if you employed three or four days in learning the five orders of architecture, with their general proportions; and you may know all that you need know of them in that time. Palladio's own book of architecture is the best you can make use of for that purpose, skipping over the lowest mechanical parts of it, such as the materials, the cement etc.

The second letter, written in October 17th of the same year by Lord Chesterfield to his son, who was then at Verona, is even now remarkable. After outlining the orders and approving the fact that the tutor had arranged for a course of lessons to be received by the son from Vicentini, Lord Chesterfield continues:

You may soon be acquainted with the considerable parts of Civil Architecture; and for the minute and mechanical parts of it, leave them to masons, bricklayers and Lord Burlington; who has, to a certain degree, lessened himself by knowing them too well.

The study of building has advanced very considerably since those days, in its practical aspects at least, if not in the direction of nobler attainments which, after all, should be the goal of every true builder. It is not my intention to take a pessimistic view of the existing system of education countenanced by this Institute, and improved upon in practice at those universities and schools where building is studied; on the contrary, we have every reason to be proud of what has been done to encourage young architects to make themselves acquainted with the innumerable branches of their profession. Much remains to be done for improvement in teaching, especially in the higher divisions of theory and practice, but reflection will show that it has always been the policy of this Institute to encourage a blending of the strictly utilitarian with the ornamental and the beautiful. These two factors can never be dissociated, for building is as much a science as it is an art; and he who attempts to exploit the one at the expense of the other would be ill-advised. The question before us is not to decide whether building is an art or a science, but to so order its study that it will become a highly scientific art.

We now come to the important question of the mechanical and material branches of practice, and their relation to concept—namely, the purpose, expression, character and beauty of specific buildings, and we can in this regard compare them with the structure of the human body. Walls, timber, steel, ferro-concrete, provide the skeleton, but of what value are these attributes if they produce deformity? The student who has been encouraged to consider the manifold branches of his profession in regard to their ultimate purpose is surely better equipped for dealing with intricate problems than one who has little idea of co-ordinating these very essential factors and incorporating them into an ordered work of public utility. Just as the sculptor or the painter builds up his knowledge of the figure by an exhaustive study of anatomy, so the architect must acquire a deep knowledge of materials and new methods of construction,

the handling of which, with skill and confidence, will ensure greater perfection in his work. This is the routine side of architectural education—not that the design branch is one whit the less important, it is universally acknowledged to be the more difficult. The weakness of the present system inheres in the fact that sufficient attention has not been given to the correlation of the two branches. As an honorary examiner in design for the past five years, and speaking from experience in this regard, only those students passed the test who had enjoyed the benefits of training at the leading schools and showed an appreciation of construction and its relation to conception. Acting on the suggestion of Mr. Crompton, the examiner in construction, Mr. Redfern and myself collaborated with that gentleman in order that the questions in both subjects should have some relation the one to the other. It is not betraying any secrets to say that the results were very encouraging. Perhaps this system will be further extended.

There is a tendency in some quarters, arising out of the contrasts brought to light by the war, to applaud the scientific methods of the Germans. We are told that the educational system in Germany has resulted in a better understanding of building; this, however, is a debatable argument. From the standpoint of chemistry applied to materials, of engineering science applied to structure, and the dragooning of the subject into ways of discipline and tidiness, a repulsive architectural expression has been evolved, but the result does not compare favourably with the refined, humanistic countenance of building in France or with the official dignity of public works in America. By all means let the chemists and the engineers of this country investigate the abundance of available material; the architect will not be slow to profit by their researches; life, however, is unfortunately too short for a student to become a complete chemist, or even a passable engineer, and at the same time acquire distinction as a capable architect. It will be sufficient if he is encouraged to become a sound builder with warm feelings towards his fellows and a determination to give of his best. When we consider the newer responsibilities facing the architect to-day, we realise how essential it is that he should be thoroughly trained and acquainted with the many and intricate ramifications of practice. There are, nevertheless, limitations to his capacity, and it is the duty of this Institute as an advisory body, granting a degree of proficiency to suitable men, to define what these limitations are. If it is true that education on the mechanic side needs careful revision and adjustment, it is more than urgent that the higher branches of training—namely, investigation of history bearing on design, and the sphere of design proper—should receive increased attention, for English architects have a reputation in the one branch and not in the other.

We have at this juncture unique opportunities of studying the latest modern expression in building in France and America. What do we find?—a new

system of building arising out of new methods of construction? No! Contrary to expectation, we find the reverse to be the case. The trained and scholarly builders of both countries have realised that construction is subordinate to conception, and are content, in all humility, to compete with the masterpieces of tradition, and to fashion the bodies of their buildings according to the taste and judgment of centuries, while employing recent discoveries in materials and science to the making of the skeleton. Does this not clearly show that a new system of architectural expression is beyond the scope of the individual, and that the underlying laws of architectural composition, call it the scientific ordering of parts if you like, are immutable? Concept and power to reason, together with the logical apportioning of the factors determined by diverse problems, is the basis of building. Here it is that the trained and specialised mind comes into action. Of what value are the bricks, stones, iron beams and concrete rafts to the man who remains inarticulate, and incapable of creating?

In the encouragement of architectural training it is essential that renewed attention should be given to the appreciation of the conditions of modern life. Following the custom of the French, students should be taken by their professors to great modern buildings, there to observe the mysteries and working in being. They should examine a railway station, note the crowds to be accommodated, the volume of traffic and goods arriving by rail, the offices and business arrangements, the conveniences, the roads for vehicular traffic ancillary to the railway tracks, the thousand-and-one details. They should inspect the Parliament Houses, the cathedrals, the public offices and Government departments, the clubs, the staging of an opera as well as the design of the auditorium, the shopping centres, life in hotels, flats, and private houses. What does a measured drawing teach other than the scenic arrangement of doors and windows, with perhaps the application of column or pilaster? What can be gained by laboriously measuring the bay of a cathedral if the ulterior purpose of the building is ignored?

In France a more academic system pertains. In the first place, there is the tradition of the Grand Prix, with its almost unbroken succession of monumental planning; and secondly, a more humanistic attitude to the requirements of the populace, and greater collaboration between architects, engineers, painters, sculptors, writers and politicians. The politician is included, for his influence is all-important in ensuring the smooth running of the educational machinery. In France architecture is just as much a part of the national outlook as literature. Both expressions are understood by all classes in varying degree, and a certain momentum to practice is ensured irrespective of local custom, fashion and prejudice. The Frenchman, notwithstanding his temperament and passion for display in the elevations of his building, is gifted with a rare and logical discernment towards the comfort and convenience of the public,

and this applies equally to the arrangement of streets and their furnishing as it does to the planning of public buildings. The planning becomes a scientific obsession; it is treated as a metaphysical problem because it is recognised that a correct solution will influence the minds and lives of countless numbers who in future will frequent the courts, halls and chambers which have been arranged, by the controlling mind, for their use and enjoyment.

It must be constantly borne in mind that the mechanic side is subordinate to the theory of conception. The architect trained to consider problems in this way is able to approach the subject in hand with a defined perspective of the conditions. He assumes an air of disinterested attachment to the facts of the programme, which he has marshalled in battle formation. When, and how, the conception is born cannot be determined; sometimes it appears unannounced, and at others it is the result of ceaseless labour and the discarding of scheme after scheme. Knowledge of what has been done before, acquaintance with precedents, and an ever-present view of the programme gives confidence; but it is always the same for master and tyro; both have to labour for results. A plan studied and wrought for on the lines given is a scientific work of art. While he works the designer is considering the relation of part to part and the harmonious patterning of the whole; he visualises in mental perspective the vertical aspects of his plan formation. The two attributes are one and indivisible. It can be argued with some certitude that recent French architecture is not distinguished for elevational treatment; and this in a degree is true, for although academic planning has been brought to a high pitch of development, the scholarship that formerly attended the vertical and outward character of French architecture during the eighteenth and nineteenth centuries and on to so recent a period as 1884, with the exception of the works of MM. Pascal and Nénot, does not appear convincing. Having conceived a suitable plan formation, and achieving a solution capable of giving the best results of perspective, as well as convenience for the circulation of internal traffic, the Frenchman next approaches the problem of scientific construction, for he has arrived at the stage when there is something to construct. Then he gives orders for the battalions of materials, the dumps of steel, concrete and masonry, the miles of drains, electric wiring, joinery and other finishings, to move to their stations and do their part. Then he applies his theorem of mechanics, of acoustics, to the parts of his design to test the shaping and prove his graphic display.

It is all a question of commonsense and logical reasoning. What is true of French practice applies with equal meaning to the astonishing development of architecture on the grand scale in America: with this reservation, the American scientists have a more subtle regard for character, and their astute scholarship in working on the larger European tradition has

brought them to the right road. The Americans in their adherence to the policy of studying precedent for external and internal character have demonstrated two things—the first being that the underlying system of composition, at all periods, has never varied; and the second, the immediate necessity for augmenting the local Colonial tradition by drawing upon historical models. The Americans on this account are not plagiarists, they are scientists, with all the system of the Germans, but free from the doctrine of the *Pickelhauben*.

As we are here to discuss methods of encouraging young architects to study the higher and specialised branches of building, mention must be made of the principles of study advocated by Sir Joshua Reynolds for the guidance of painters; they apply with equal force to architects and building.

Reynolds spent three years in Italy observing and reasoning over all the minutiae which go to the building up of a picture, and returned to England an accomplished master in picture-painting. He began by analysis and ended by synthesis; his learning was profound, and he had the confidence to know that precedents are a stimulus to invention. His methods were not acceptable to everybody, for the reason that few took the trouble to understand him. There is the memorable instance of Hone's picture of 1775, entitled "*Pictorial Conjurer displaying the whole Art of Optical Delusion*." In this satire Hone represented a figure supposed to be of Reynolds as an aged man, with a wand in his hand, and a child leaning against his knee performing incantations, by which a number of prints and sketches from which Reynolds had, as it was intended to insinuate, plagiarised, were made to float in the air round his head. Among the lectures of Professor Cockerell given at the Royal Academy,* the following lines occur which have distinct bearing on our discussion this afternoon:—

No man ever invented an order or a series of mouldings. These he accepts from the greatest and most reputed masters who have preceded him; he stores books, designs and portfolios, and prides himself, like the lawyer, on his precedents and authorities. Absolute invention he never proposes to himself for a moment, but by an enlarged study of history and examples he is enabled to detect the petty prejudices of schools, to emancipate himself from the trammels of nationality and fashions, and to regard the works of all times and countries as subject to his use in so far as they may be conformable to strength, convenience and beauty.

The name of Professor Cockerell is one of the brightest among the nineteenth-century designers, for he was a constructor of consummate skill, and an architect with an international reputation for scholarship. Had he secured a larger following his influence would have been very great during the past fifty years, and English building would have been consistently improved.

While entirely in agreement with the ideas ad-

* The loan of the original manuscripts has been accorded to me by the kindness of Mrs. Frederick Cockerell.—A.E.R.

vanced at the last conference regarding the application of scientific knowledge of buildings, it is not possible to concur entirely with the idea that this theory has altogether been ignored in the past. There is doubtless room for great improvement, but it must not be at the expense of the larger issue of design.

If there is a branch of training that needs revision in addition to the mechanical side it is the one embracing the investigation of history. Whether the time is mature in this country for the consideration of one general style—a policy encouraged in France—is a matter for discussion. But it is obvious that existing methods of teaching architectural history, by treating the phases as phenomena, are wrong. The investigation of history as an aid to accomplishment in the practice of building should proceed on the lines of adaptation to modern needs. The family likeness of all buildings evolved during the past three thousand years should be brought to the notice of the student. Marked developments, such as the Classic of Greece and Rome, the idylls of the Renaissance and the modern Classic of Europe and America, should receive fuller attention than they do at present. This is essential if we are to advance either in construction or design; and just as the parallels of the classics in literature offer consolation to us in these times, so the buildings of the past can be referred to to inspire confidence for the future. Evolution is the only true theory that can be followed and its manifestations studied with advantage. We also desire to reach the ideal by the shortest road and the least fatigue; some expect a new type of design to arise out of materials; they convince themselves that time-honoured methods are out of sympathy with the high pressure of modern life, and overlook the chief factor in their dream, which is that the ideal is only attained by climbing the steps of generalised ideas.

Construction in these days is really simpler than it was in the past. We can dare more, build lighter, span greater openings and perform divers tricks of conjuring; but such performances do not prepare the way for our reception in good society. Neither will our audience applaud such actions if these antics are not part of a pithy plot. The Romans were the great constructors of the antique world, but their buildings in conception are unique, and they took care to present them decently. The skeleton of the human frame is not a beautiful thing, but the vigorous body in full development is, and Mother Nature wisely guards against incongruities by providing cartilage for ornament. The simpler the construction the greater the realisation of the idea; and whereas construction is variable, concept is always constant.

One outstanding fact remains to be discussed, and that is the promotion of healthy competition between the individual students of recognised schools, and friendly rivalry encouraged between every university and training college where building is studied, either through the agency of monthly competitions and

exhibitions, or public criticism of the works on exhibition by the eminent men of the profession. Another suggestion is that the drawings made by a student for the Prix de Rome or any of the Institute prizes, in the event of their receiving an award, should become the property of the Institute or the university, and should be accessible to every student for reference. In our appreciation of the concrete side of tradition, the importance of a tradition based on unexecuted work is apt to be overlooked. Yet this is just as much a guide to national progress as work actually carried into being. The value of the paper tradition in France is continually asserted, for the authors of the Grand Prix designs invariably incorporate unique features of their prize schemes into the buildings they are commissioned to design in later life. Evidence of this procedure is to be seen in Monsieur Nénot's amphitheatre in the Sorbonne, which is noted for its D-shaped plan. My remarks at the previous conference aimed at drawing attention to lines of general policy, and there is no need for me to recount them. In conclusion, gentlemen, perhaps it will not be inopportune for you to glance at the monograph of the New Pennsylvania Railway Station, which is familiar, but which illustrates my points more effectively than lengthy arguments. Here will be seen that combination of science and art in which the engineer humbly performs his part and interprets the Piranesian rhetoric of the chief builder.

PROFESSOR BERESFORD PITE [F.]: I am sorry to say I feel that we are in a mass of generalisation and theory, which is possibly interesting, but I doubt if it is practical or educative. The flood-gate seems to have been opened, and floods are pouring through the gate pretty freely, and are rapidly drowning us, one after the other. But if we come to the real thing, and ask ourselves stray questions as to the educational programme, either that we are practising or believing in, it will be very difficult to derive very much from either the Chairman's address or Mr. Richardson's. Frankly, I do not so much want to be critical as to be practical. At the present moment architectural education is run with a constructive side and with an artistic side. This is mainly through the syllabus of the Board of Education and the educational scheme of the R.I.B.A. It is easy to rave at it, for it is hopelessly bad in theory. The construction and the art of the subject ought never to be separated. But, as a matter of fact, I think I am right in saying that there are no books that deal with these subjects as a unity. There is an abundance of books which deal with construction and which make the learning of construction simple, from the earliest to the advanced stage, and which follow the art of the builder and the art of the engineer progressively. There are a number of books also which deal with the external aspects of buildings, ancient and modern, which are themselves interesting and important. And it is with these two sources of supply that the teacher

has to work. These books provide the text-books for the elementary and technical classes, they provide the text-books for the elementary art classes, and for the architect's office book-case. It is with the material of these works that the work of education is done. You cannot get away from that simple fact.

When you have to teach youngsters or to learn yourself how to build in these days, you find you have to deal with the building owner; and in spite of all the ornamental language as to "concepts," he is the fact. Whether he wants miles or acres of this or that, he is the commonplace individual. He may be a parson, or a town-clerk, or one of those very hard-headed "business men" who know very much better than you do what they want. It is your duty in life, without erecting yourself upon a pedestal as a demi-god or prophet, to translate into the terms of the builder the requirements of your client. If you do that as ordered you are doing your work. And let me remind you that that is the work for which you are paid, and for nothing else: you are paid five per cent. for that. This right to charge is at the root of the Registration problem.

Where does the architect come in? He comes in as a gracious element who does something for nothing; he supplies the art, and the supplying of this art is, of course, his speciality. And it is the supply of this art which is the thing that, frankly, you and I are very anxious about. Our membership of the Institute, our five per cent. is one thing: but the thing that brings us together this afternoon is not a matter of five per cent., or anything of the kind: our mutual point of contact is that which we have to supply, through the builder to his client, an element which is common in our hope and ideal and desire, the element that we call our art.

That being so, let us look at it. What is it? Where does it come from? What does it mean? It is a gift of God, because some have it, and some have not. Some of the best-toned souls one knows in the world are perfectly hopeless in the matter of artistic appreciation and of the understanding with which one starts. This is less true in architecture than it is in sculpture, or in painting: but still, it is there. The possession of the Divine afflatus, or inflatus, or inspiration, whatever it is, is the indescribable something which knits us together. It is that which filled the soul of the youngster with enthusiasm for the work of Norman Shaw: we knew nothing about his construction, or the masterly way in which he handled his clients, but we were charmed by the inexpressible art of his designs. And it is the same always; it was also the same with Street.

We deal only with the art of the past, and in a wonderful way are in connection with all buildings; our real problem is its encouragement, its strengthening, recognition and training, so that it gets a proper sphere. I do not think myself that it can be induced by education: it may be educated by education, but it cannot be induced by it. And, of course, where it is,

you open to it: it responds to you, and you respond to it. You take the student by the hand—or the student takes you by the hand, and there is found a unity of judgment which is perfectly amazing: it is a responsiveness of intellect which some have, and some have not, which is wonderful, as we move along together. Construction, plan, historical character are there all the while, but upon, in, and through all is this indefinable artistic magnetism. And yet it is something more than that, for this fluid intellectual current makes the difference between a man who is a real and the man who is a sham architect, between the man who is an artist and the man who is not. Beyond and behind that I do not know how to go; but we recognise it, enjoy it, and are helped by it, for there it is.

Of course, this indefinite consciousness of art is not the end of the matter, but it seems to me its current began to be recognised first in the time of the Renaissance, and we are children of the Renaissance in that we, in using this eclectic sympathy, have made a profession of it. Behind the Renaissance in the Middle Age everything is infused with it. I am unconscious of being able to go through the group of churches in England and saying, "This man was a good artist, that man was a good architect, or that man was a bad designer," or similarly with the Greek world. I am inclined to suggest to Mr. Richardson that his view of Roman architecture is one which will not bear much analysis. The Roman looked upon the world in a different way, and the man who unhesitatingly appreciates the architect of the Colosseum is a man who does not know what he is talking about. The engineering qualities of that building are of the highest appeal, but the architectural qualities are very poor. In the Mediæval world, or in the Byzantine world, or in the Greek, there is a universal artistic appeal. One is conscious that one's sympathy is attracted to every phase of it, though if you analyse it you find it very difficult to ascertain what this attraction is.

I must stop talking, or I shall be getting out of my depth, and out of breath too. The sympathy one has with Nature, the effect that ruin has upon one's mind, the accidents of time and history: all these things began to enter into the poetry of the artistic effect, and it is exceedingly difficult to think oneself out of one's own age. We are the children of the Renaissance looking back into an age out of which everything appears to us to be beautiful and powerful and fresh.

Now, in conclusion, I will only venture to make this suggestion. I think the first practical effort should be to bring our building construction books and our architectural history books together. And to bring the studies together, to bring the teachers together, and to make one teacher teach both subjects as the same. It is deplorable to see the teaching instruction books still dealing with the wooden roof as if the truss system was not invented by the

Romans : to make it historical would be much more interesting than the dry way in which it is dealt with. Deal with walling in the same way, so that the builder is infused with the history of the subject. The Institute Board of Education ought to secure this reform. The policy of the Institute Board of Education will be revised as soon as the war is over—the scheme was approved by the Council before the war broke out—then we hope that a co-ordination of examiners and subjects will be carried very much further than it ever has been, so that the constructional and the design examinations are practically one.

But I must apologise for having worried you at such length, and yet to come to such an imperfect, halting conclusion, but I hope we may combine our instruction and our design in one set of books, studies and examinations, instead of two.

PROFESSOR F. M. SIMPSON [F.] : I am sorry I was unable to be here at the last Conference. In the letter I received from the Secretary, asking me to take part in that Conference, I was told that what were wanted were concrete suggestions, and, as far as possible, I arranged what I intended saying last time on those lines. I shall now modify that somewhat, because it would, in many cases, be merely going over again the ground that was covered a fortnight ago.

I was very glad indeed to hear that insistence was then laid on scientific—or what is sometimes called engineering—construction. A hundred years ago all construction was architectural. The engineer came in with iron and steel ; and owing to the changes in construction—well known to all of you—during the last thirty years or so he has more and more been getting his " mailed fist " into the vitals of an architect's practice. I am given to understand that among a certain class of clients—those who build the big offices in the City, for instance—the idea is growing up that an architect is a sort of decorator, a person who clothes with stone or some inferior material the construction of the engineer. If it is true that idea exists I think the sooner it is nipped in the bud the better. The question is how this can be done. The engineering profession, I think all of us will admit, is very much better organised than our profession, and there is no doubt whatever that the training of an engineering student is very thorough.

The remedy, I think, is that our students should have the same comprehensive, systematic, scientific training in this important branch of their work that engineering students receive. And that training ought to be given in a thoroughly equipped laboratory, so that theory and practical tests can go side by side, exactly in the same way as is now the case with engineering students. I do not think it is necessary to carry that training quite as far as an engineering student carries it, and for this reason : an engineer has to deal with most complicated matters of construction, such as huge steel bridges, etc. But what I do think is that the training of architectural students in this branch

ought to proceed sufficiently far to cover all construction of ordinary buildings, because that is our business. Our business is to build. I think, therefore, that a knowledge of steel structures and the elementary forms of reinforced concrete is as necessary for the architectural student of to-day as a knowledge of ordinary brickwork and carpentry was in the days when I was a pupil.

With regard to design, a subject which apparently was discussed freely last time—and Mr. Richardson has alluded to it again to-day—as I understand it, there are practically two main roads along which teaching in design can proceed. There is, first, what may be termed the traditional or vernacular ; the other is the elemental. It was building construction combined with tradition that produced the delightful work of the seventeenth and eighteenth centuries in this country. No country in the world that I know of is so rich in medium-sized buildings of these periods as England. The policy followed for the last thirty years by most architects has been by a study of these old buildings to try and pick up the threads of tradition which were broken by the Gothic Revival of the last century. Personally, I sincerely hope that this study will never be dropped, nor this road neglected.

Elemental design deals with first principles ; with massing, grouping, chiaroscuro ; and leads up to problems in composition on a grand scale. It is this elemental design which is chiefly followed in France and America, though for different reasons. In America there are no traditions. In France the traditions have never been broken ; they have existed for the last 250 years : in fact, ever since the *École des Beaux-Arts* was instituted. Take one small instance, window design. Window design in modern French work is practically the same now as you find it in Gabriel's *Petit Trianon* at Versailles of the end of the eighteenth century, and in François Mansard's portion of the *Chateau de Blois* of the first half of the seventeenth century. There is no need for special direction to old work in France, or for the conscious inclusion of a study of it in the schools. The French have tradition in their blood.

In England it is different, and I think the two roads of design should go hand-in-hand, side by side together in any scheme of preliminary training. Both are valuable. The attention of students should be directed to both in the early stages. I do not believe in forcing a student along any one road, and one road alone. When he has passed through his preliminary training, then, according to his inclinations, ability, and prospects, he can choose which road he will elect to follow. The chief aim in all teaching, as I understand it, is to teach a man to think for himself. If you can do that, I think you have done all that can be expected of you at the beginning. Point out the different roads to him, and he can then be left to choose for himself what he thinks best.

Elemental design can, of course, be carried very

much further than what I have called the vernacular or traditional; and I gather from what the Chairman said that Mr. Atkinson referred to this last time; while Mr. Richardson also alluded to it in his remarks to-day. The existing schools can deal with both, with the elemental and with the vernacular, up to a certain point. But I think we want higher schools to carry both—especially the elemental—still further. The Beaux-Arts, in Paris, is such a school; and in Columbia University, New York, there is another. The Columbia University School was reorganised about ten years ago, and I will read you a short extract from a paper written by Professor Hamlin, and published in the *Columbia University Quarterly*, of June 1906. In it he describes the changes which were taking place, but I shall deal, in this reading, solely with those referring to advanced design work done in the studios.

"The University maintains three studios, two of these down-town and the third in Havemeyer Hall (the University building where the School of Architecture is). These studios have each a director and an associate director or assistant. Mr. Charles F. McKim assumes the directorship of one of these rooms and Mr. Thomas Hastings of another. Mr. W. A. Delano directs the one at Havemeyer Hall. Students of the three rooms are thus brought directly into contact with three architects of experience and distinction, two of them standing in the foremost ranks of the profession. . . . The preparation of the entire schedule of the work in design, the formulation of the programmes for the different problems, and the arrangement of all the administrative details of the work are handled by a sub-committee representing each of the three ateliers or draughting rooms. The preliminary sketches for the designs are all made on certain fixed days at the University. The designs are worked out in the several draughting rooms under the various instructors, and are all handed in upon a fixed day and hour to an attendant in Havemeyer Hall. At another fixed date these designs, having been properly mounted on stretchers and hung on the walls of the Model House for exhibition, are judged by a jury consisting of representatives of each atelier and two or three practising architects chosen from a special annual jury list. The jury awards 'passes,' 'mentions,' and 'special mentions.'"

I am not certain whether this is the kind of scheme Mr. Atkinson proposed. It is, of course, to some extent, modelled on the *École des Beaux-Arts* at Paris, though it departs from it in some respects. The advantages of this scheme can be summarised as follows:—

1. There is one central control; and this control includes the leading architects of New York, who change from time to time.
2. Each student can choose his own studio and visitor.
3. The visitors change; there is no danger of their becoming fossilised.

4. The work in all three studios is judged together.

5. Students see how students shape in other studios.

If some such scheme as this were adopted in London, there is no particular reason why the number of studios should be limited: there might be three, or half a dozen, or as many as found advisable. The main great advantage of the scheme as a whole is that both teachers and students are brought together. The result of this communion must tend to bring architectural design into line; to ensure progression in the same direction; and eventually to produce that harmony of architectural expression, so lacking in the work of the last century, which is absolutely essential if our art is to make real and substantial advance.

Now just a few suggestions, which I will merely mention, but not argue, on some main general points in connection with architectural education. It is now about ten years since the Board of Architectural Education recommended training in a school, but left that training optional. I suggest that the time has come when it should be made compulsory; that a notice might be issued now to say that at the end of three or five years—a period which would depend on circumstances—a year or more must be spent by all students in an architectural school before presenting themselves for the Final Examination of the Institute. The suggestion of three or five years follows the precedent set by the Institute itself when it abolished its voluntary examinations and made the examinations compulsory.

If that suggestion be adopted, the Intermediate Examination could be abolished. The principle is already admitted, inasmuch as partial abolition already exists in the exemptions which are granted to students in a school who obtain a First-class Certificate. This change would not entail the abolition of the Student stage. The Preliminary Examination, as you all know, has been abolished, but the Probationer stage exists; and the Student stage would also remain, but would be reached by education, not by examination: in my opinion a far more satisfactory method. Of course, some safeguards would be necessary. The number of external examiners would have to be increased, and there would have to be cohesion between these examiners to a very much greater extent than exists at present. Possibly the external examiners might form a sub-committee of the Board of Architectural Education.

My last suggestion is that the heads of the recognised schools might meet annually to discuss details of curricula and other matters and report to the Board of Architectural Education—somewhat on the lines of the Headmasters' Conference, which, I think, meets once a year and reports to the Board of Education. Possibly, also, if some such meetings were instituted, the teachers of architecture in the schools of art throughout the country might also be invited

to attend. I was for two or three years one of the three examiners in the National Competition which is held every year. One thing which struck us strongly then was how wrong in many instances was the direction given to students in these schools. It would, I think, be a good thing if their teachers—some of them architects, some not architects—could be brought into touch with the heads of the different recognised schools. These matters, of course, are more for the Board of Architectural Education and for the Council of the Institute than for this Conference, so I do not argue them at length. I have merely brought them forward, following the request made to me by the Secretary, as concrete suggestions for discussion.

MR. A. R. JEMMETT [F.]: From one point of view this discussion on education is perhaps premature, as we have not yet decided exactly what an architect is and what his functions are; consequently we cannot decide what it is we want to teach him.

The whole subject divides itself into two—what you want to teach and how you are going to do it. What you want to teach ought to come first, the method whereby you teach or the arrangement of schools can come afterwards.

As Professor Lethaby points out, the great thing is to concentrate on what we agree upon and so try to make progress. On the subject of what we want to teach there has been no agreement arrived at yet. There is a marked difference of opinion between, for instance, Professor Lethaby and Professor Adshead. Professor Lethaby seems to want to concentrate on structural perfection as the end and aim of architecture and to limit our training to the sciences necessary for that purpose; but this would not fulfil the programme put forward by many other speakers. I have great sympathy with Professor Lethaby's point of view. I think it has been of immense value to the progress of architecture during the last fifty years as a standing protest against the chaos that followed the Gothic Revival, but I find it difficult to accept its limitations.

Structural perfection as an end in itself seems to be the aim of the builder or craftsman rather than that of the architect in the widest sense of the term. Indeed, if Professor Lethaby wished to reform the education of the builder or the craftsman, what else would he say to them? Apart from the fact that this structural theory does not help us much in the designing of monuments that serve no practical purpose and entirely ignores the architect's skill as distinct from his knowledge, it seems to leave out the one essential thing—the arrangement of structures to express ideas.

It might help to clear our minds on this point if we analyse the effect produced on us by objects that please and endeavour to discriminate between those which raise vague or indefinite emotions and those which suggest precise or definite ideas. The works of Nature raise vague ideas or emotions. Look at the

sky or the sea, at a tree or a flower, and we are pleased. But no definite ideas are put before our minds; on the contrary, our minds read their own ideas into the scene. An instance is afforded by the familiar song, "What are the wild waves saying?" They are saying anything we choose to imagine they are saying, while as a matter of fact they are, of course, saying nothing. I am inclined to think that on the lines of Professor Lethaby's structural theory we can obtain structures which appeal to us in the same pleasurable but vague way as do the works of Nature, but I do not see how this theory can help us to produce works that express definite ideas or transmit definite emotions. It is possible to produce structures of perfect beauty but without precise meaning—saying nothing definite because they have nothing definite to say. It is also possible to produce other structures which, in addition to the indefinite appeal of the beauty of their perfection of structure, have the additional charm and power of conveying or expressing definite ideas. I think it important to bear this distinction in mind, as in my view works of architecture have this added power and charm. Perfect structure or craftsmanship does not appear to be complete architecture until it has been arranged or grouped to express ideas. A structural theory ignoring this point seems to limit the possibilities of architecture. Structural science may teach us how to build, but it will not teach us where to put our buildings, how to arrange and lay out the buildings of a university or a hospital to express its purpose or the public sentiment that seeks expression in the building. It may teach us how to construct perfect chairs and tables, but it will not teach us how to arrange them in a room to express or symbolise the idea lying behind the purpose of a meeting. It may tell us how to construct such a feature as the Piazza of St. Peter's, but it will not tell us when and where such a feature should be constructed.

The arrangement or the planning seems the important thing. We need a theory teaching us how, having got our perfect scientific structures, we may so handle them or arrange them as to express ideas; a theory of architectural expression as distinct from a theory of construction. Such a theory exists at the École des Beaux-Arts, where there is a Professor of Theory, and until we reach some such theory here, including the art or science of architectural composition, we shall not get much further with our education.

I am disposed to think that the situation here as regards architecture is much the same as it would be in regard to music if the theory of music had been entirely lost, while gifted persons continued to improvise or copy the works of the musicians of the past; sounds might be produced pleasing to the amateur but objects of indifference or of ridicule to the theoretical musician.

Seeing the need of some theory or generally agreed method by which to express ideas in terms of architecture, I am hoping to persuade Prof. Lethaby and those

who think with him to advance along the lines of such a theory provided it is scientific, precise and logical. I think if Professor Lethaby will add to his structural science the science necessary to this theory—such as the science of æsthetics, of psychology, of human nature—that others would perhaps agree to keep their activities within its limits. It was my hope in intervening to get things a step further in this direction.

I have already spoken too long on what I consider we want to teach—viz., the theory of architecture. On the question of how we should teach I will only say that to my mind all teaching should be subordinate to, dependent upon, and inspired by this theory—a theory in which such subjects as science and history find their natural subordinate places. I would simply add that we have to remember that the principal aim of the architect is to acquire skill in design, and that the sole object of acquiring scientific knowledge is for the purpose of making him a better designer or of enabling him to carry out his designs. Beyond this it has no value whatever.

As I said before, I have a great appreciation of Prof. Lethaby's theory of the scientific structural perfection of building. It so nearly satisfies the whole of one's mind that for that very reason I feel it is dangerous and misleading. It seems to leave out the one essential thing that distinguishes architecture from engineering or building—the one thing which the architect can do and which no one else can do. Others can build, but the only person who can design is the architect. He arranges structures to serve their purpose and to express ideas; if he does not do it no one else will. This seems to be the one thing that will justify his existence in the future and therefore the essential thing to teach.

MR. H. KEMPTON DYSON: From the report of the first of these informal discussions I see that Professor Lethaby was their originator. For many years I have studied the remarks of Professor Lethaby, who represents a definite school of architectural thought. If his ideals were followed in architectural education I believe we should no longer feel that architecture was not occupying its proper place in modern civilisation. He has for long urged architects to study the art and science of building and to be sure of the fitness before expressing themselves in the mannerisms of the past. I am glad that he asked us to look upon "architecture as primarily the art of building cities," because the man who merely calls on us to abandon our ways and live the "simple life"—the life of uncivilised man—is not likely to be asked to co-operate with the commercial world in coping with the practical difficulties met with in the progress of modern civilisation.

The cry is that the engineer and the surveyor are usurping the place of the architect. Two favourite apophthegms of the engineer are, to quote the Prince Consort of Queen Victoria, who is reported to have

said, "If I wish to talk about a thing I send for an architect, if I wish to get it done I send for an engineer"; and the American who said that "An engineer is a man who can do for one dollar what any fool can do for five." These remarks express two common ideas among the ignorant public—namely, that an engineer is superior to an architect because he does what is wanted and he does it cheaper. Now that ought not to be. Personally, though a consulting engineer, I hold that the engineer in building work is not, and never can be, entirely sufficient by himself. The work requires to be organised and controlled by an architect if it is to be completely efficient.

It is quite a common idea that the employment of an architect is in the nature of a luxury—that he will cost you more and incur large extras. To what has the country been led by the misunderstanding of the qualifications of the architectural profession by our Government Departments? I have no hesitation in saying that the result has been the loss of millions of pounds sterling and the prolongation of the war. The amateur and the quack have rushed in, and contractors have been given practically *carte blanche* in building operations, with the result that inefficient buildings have been erected, material wasted, labour allowed to get out of hand and the completion of urgently needed structures for war purposes seriously delayed by months. The architectural profession has been pushed on one side to make way for a crop of self-styled factory specialist designers who are in many cases incompetent. Some firms who seek to furnish constructional schemes to architects advertise to provide factory owners with complete designs without the intervention of an architect, and employ architectural draughtsmen with that object. The architectural profession might with advantage protect itself as the medical profession has done against the quack. It should ostracise those trade firms of so-called constructional specialists in steel and reinforced concrete and the contractors who deal direct with clients without the intervention of an architect, whereby the interests of the building owner are not protected. Selection on price alone results in inefficiency. Architects should only co-operate with other professional men, such as engineers, and not become associated with contractors and other commercial firms as they do when they accept schemes from them. Strict professional etiquette in co-operation with the engineering, surveying and other professions would bring its own reward.

The education of the architect in the past has been lacking in that it has not made of him a scientific man. The student has not been made to appreciate the fact that he need be none the worse an artist because he has a knowledge of the many branches of science that are required by an engineer, for example, to achieve success—namely, mathematics, chemistry, physics, mechanics, business economics, ethics. Scientific training will make him precise, systematic, able to analyse and synthesise. The architectural student

should be taught to be a business man. The ideal to strive for is that architecture should be so expert a profession that a layman would no more dare to interfere with the work of the architect than with the work of the engineer. It should be impossible to get an efficient building so economically from anyone as from an architect.

Greater attention should be given to the study of details of professional practice. Why does this Institute so seldom have papers read on experiences in everyday professional practice? What the younger men ought to be told are the business methods of the successful architect. The comparison of experience would be of value to all, even to the successful practitioner.

Building construction has not been taught properly. The teacher should begin with a course in science—mathematics, chemistry, physics, mechanics, properties and manufacture of materials—and then show how the various details have arisen by the application of the fundamental principles in the endeavour to fulfil the function. The reason, or lack of reasons, that led to the variant forms of the detail under examination and the differences in building practice of various countries should be contrasted. Such instruction would show clearly when and where alteration in standard forms should be made. Invention in building construction should be encouraged.

The word "Art" is used in more senses than one. By "Art with a capital A" is often meant æsthetics—a science; in that sense we could speak of the Science of Art. Why not have Art studied both as a science and an art (with a small a)? That is to say, why not study it in theory and in practice? The theory has been too much neglected, with the result that architects too often lack originality. With all who are engaged in the creative professions, such as architecture and engineering, imagination and inventiveness should be trained and encouraged.

MR. ROBERT W. S. WEIR read extracts from a Paper he had prepared which is here given in full:—

I take it that architectural education has been selected as one of the subjects for discussion at these conferences because it is generally agreed that there is something radically wrong with the present system of training. This subject of architectural training created a good deal of controversy some twenty-five or twenty-six years ago, and I really think we have not got much "forrarder" since then, in spite of all the schemes that have been initiated and put into practice in the interval. Looking over my bookshelves a few days ago I happened to come across two volumes whose existence I had almost forgotten; in fact, I may say that their existence seems to have been generally forgotten. But the subject-matter contained in both is as apposite to-day as it was when it was originally written, and I recommend them to the careful study of all who have at heart the real advancement of architecture as a living art.

The one is entitled "Six Essays by John T. Emmett," and is dated 1891. It consists of a reprint of articles from the *Quarterly* and the *British Quarterly Reviews*, written at intervals between 1872 and 1881. The names of the first four are:—"The State of English Architecture," "The Hope of English Architecture," "The Profession of an Architect," "The Bane of English Architecture." The other volume is called: "Architecture a Profession or an Art: Thirteen Short Essays on the Qualifications and Training of Architects." Edited by R. Norman Shaw, R.A., and T. G. Jackson, A.R.A., and it bears the date 1892. The first I have only had time to glance at again; the second I have looked over a little more carefully, in order to somewhat revive my memory as to what the old controversy was all about, and I find that we were then just about where we still are to-day in most that pertains to the subject before us.

The controversy raged primarily round the question of registration of architects, and naturally a good deal was said and written on the subject of architectural education. A Bill had been introduced into Parliament for the purpose of making architecture a close profession. A protest against this proposal, signed by a large number of architects and others, had been presented to the President of the Council of this Institute, and a copy of it had been forwarded to and published in the *Times*, with a covering letter signed by four eminent architects—Norman Shaw, Jackson, Sedding and Arthur Blomfield; and by two equally eminent painters—Alma Tadema and Burne-Jones. Further, seven of the younger architects, signatories to the protest and members of this Institute, had resigned their membership—R. Blomfield, Horsley, May, Macartney, Newton, Prior and F. M. Simpson—all well known to-day, and I am glad to say still amongst us.

Some ten or eleven years ago (to be precise, in 1906) these men were all induced to come back into the fold, and they brought in with them others of the protestants, of whom the most prominent of the then younger men was the member at whose suggestion these conferences are being held here now.

The Parliamentary Bill was, however, really a mere detail. The controversy mainly hinged round the question of making architects by examination. The Institute had, as a matter of fact, opposed the Bill, as Mr. Jackson pointed out in his introduction (p. xxx.):—"Under another name the Institute has a registration scheme of its own with which the Bill would have interfered seriously, if not fatally. It has within a few years established a series of examinations which must be passed by all who wish to become members of the Institute; and as it is the constantly avowed desire of that body to make itself co-extensive with the profession by sweeping all architects into its net, it is obvious that it aims at securing for itself that monopoly of examination and diploma which the Bill sought to confer on others." Much of what he says has now happened. Registra-

tion is, or was before the war, I understand, a great and burning question of politics in the Body.

This subject, however, I will not enlarge on. What I am principally concerned with is the fact that, in spite of all that has happened, in spite of the influx of the large body of protestants, examination appears to be more firmly established than ever. Blomfield has been your President, Newton is now, Lethaby is an active member, but what impression have they made on this question. Are they now agreed that it is the best way, perhaps to them the only way; if not, why did they not strenuously set out to alter the system radically?

The other day I asked a friend, who is one of the examiners, and who himself passed in by examination about the time of the great controversy, whether the examinations went on much on the old lines. Yes, he replied, but they are much stiffer.

These essays of twenty-five years ago argued against the *principle* of examination. The following are a few quotations from various essays in the book by different authors, now all members of the Institute:—

Blomfield:

(1) "The Institute examination as a means for the advancement of architecture is a farce and a sham."

(2) *Again:* "I have heard architects, whose experience entitles them to speak, say distinctly that this examination does not qualify young men to be competent assistants, much less competent architects."

Lethaby:

(3) "The so-called training of architects at the present time consists not in being taught their art, but in learning more or less by rote out of books some facts about it *when their art was an art*."

(4) *Again:* "When the arts of building are all of them killed out finally, and the memory of their doing dead, who shall build them up again. Will being examined in architectural history, practising a mechanical system of drawing and acquiring the completest equipment of all the routine of the profession give back to us the skill and delight of the craftsmen."

I could quote many others did time permit.

And now we come to the point that I have been endeavouring to lead up to.

To my mind practically the whole of the architectural training in this country is affected by the fact that these qualifying examinations exist and that most of the young students are working with the avowed intention of trying to pass them.

This is one of the greatest faults in the present system, and until it is remedied—and it can be remedied—there seems little chance of real progress.

Sir Thomas Jackson has never wavered from the principles he laid down twenty-five years ago. The following views he expressed then are, as far as I know, still his to-day. He and Mr. Basil Champneys are, I believe, the only living representatives of that memorable company that signed the protest who are outside the Institute still.

He says (p. xxiv.):

"It is difficult to overrate the mischief that is done to the architectural student by misleading him in his studies and making the passing of examinations his aim, instead of the acquisition of a sound knowledge of his craft. He studies not to know, but to pass; he thinks he can learn from books and drawings of things what he can only learn from things themselves; he mistakes archeology for art, and imitation for design: he is forced to push aside things he really cares for because they may not pay with the examiners, and to leave half-mastered subjects that interest him because it is time to cram up something else that is sure to be asked. These evil influences affect the teacher as well as the student. 'The highest kind of teaching,' says one great authority on education, 'which aims at formation of mind, cannot find free play for itself under a system which subordinates the teacher to the examiner. Such a system has a perpetual tendency to give a mechanical character both to the teaching and its results. Originality and freshness in the teaching is killed by the perpetual necessity of paying regard not to the subject that is to be taught, but to the examination that has to be passed.'"

It is quite possible, however, that so long as architecture maintains its present position as a *profession*, so long will examination in some shape or form continue to exist, and more so if registration becomes a *fait accompli*, which Heaven forbid.

Further, the regulation and control of such examinations are likely to remain in the keeping of this Institute, acting in collaboration with other kindred bodies, but so long will the real and efficient training of young architects be cramped and ineffective.

But there are other forces rising up, backed by a public opinion slowly but surely being enlightened on essentials.

In various large provincial cities we now find flourishing municipal schools of art and craft in which the teaching of architecture takes an honourable place in association with the crafts.

The London County Council are giving serious consideration to the question of training in architecture in association with the crafts of building. A fully equipped and wonderfully efficient school of building has been in existence for some time in South London, of which Mr. H. W. Richards is Principal and Professor Beresford Pite is Director of Architecture. A course of higher training might follow on either in connection with the universities or otherwise, and young architects passing through these schools would have the opportunity of working for a definite aim which will be attained through the merit of their work, and not by artificially set examination papers.

Already the London County Council awards its Scholarships not on the results of examination papers, but on a careful consideration of the quality of the work of the term. It was my privilege a year and a half ago to act as an adviser and report on the work

of candidates for L.C.C. Art Scholarships in this connection, and I was much impressed with the simplicity and efficiency of the system through which awards were given.

Further, school work must go on in conjunction with practical training; by this I mean training in actual contact with real work, training under a competent practising architect, who will be required to allow time off in working hours for the student to attend classes and lectures, or engage in craftwork of one form or another.

To again quote Sir Thomas Jackson (p. xxviii.) :—

"Our proper field is not confined to the office; we are, or should be, still more at home in the workshop or the building sheds; our brethren are not the lawyer and the doctor, but the craftsman and the artisan; and if the architect should choose to be his own builder or craftsman, and carry out personally the works he designed, he would but be doing what was done by his predecessors, whose handiwork we now take for our model. If architecture is ever to live again amongst us the professional idea must disappear."

When I was very young and at the start of my training, I had to go at 8 o'clock to the old Drawing School at Edinburgh and do an hour's work before proceeding to the office. In Scottish universities the lectures begin at 8 a.m. summer and winter, and students of Law, for instance, go to lectures before office hours much as we used to do. I fancy a similar system pertains in France. Why should it not be possible here? We shall have to lead a more strenuous life, work harder and start earlier, after the war.

But what will happen to this Institute under such new external conditions. It may have to revert to its old pre-examination times position, referred to by Mr. Reginald Blomfield in one of the essays. He says :—

"The old position of the Institute was safer. It had its fine library, its Royal Charter, its considerable financial resources. It had all that was necessary to make it a centre of scholarly discussion and research on questions of architecture, and an official headquarters of reference on points of professional procedure. . . . But it has stepped outside this useful and honourable position: in its solicitude for architects, it has aimed a dangerous and insidious blow at architecture itself."

In conclusion, I should just like to read you a further quotation from Sir Thomas Jackson (pp. 230-232) on the possibilities of the future. Some of you may perhaps call the idea verging on the Utopian; for my own part I believe in its thorough practicability and efficiency.

"Imagine, for instance, some National School of Architecture, to which anyone connected with building could have access, whether he intended to be an architect, or a builder, or a craftsman in one of the arts connected with building. Let there be no conventional distinction of profession, no barriers of

etiquette to divide the students. Furnish the school with competent teachers and appliances for study in every branch of the art. Let it be possible to learn all the mystery of good construction, but let construction never be taught except in connection with design, nor design except in connection with the proper and natural use of material. Let the school be regularly visited by those who are recognised as masters of the art, to whom the paid teachers should be subordinated, and to whom the students could look for direction, advice, and correction of their taste. Let the students have every opportunity given them of seeing work actually done, and of themselves putting their hand to it. For those who have no workshops at home, which the young builders would naturally have, let there be attached to the school, workshops where the process of every handicraft could be demonstrated, where masonry, carpentry, joinery could be practically taught, and a forge where iron could be wrought. Drawing of a practical kind should, of course, be taught, so that every student might be able to set out and explain his ideas to the workmen or himself. Here those who mean to be ordinary builders might, if they please, stop. The school would, of course, be graduated, and it would not be necessary or desirable that everyone should go through the whole course of artistic training. We do not want our finer tools to do our rougher work, and we do not employ our most accomplished artists on ordinary occasions. The great thing would be that up to this point all should have been trained alike without distinction, and that the builders should have associated with those who aimed at higher flights, and should have shared in the same training under the best masters of the art. In this way we might hope to introduce into the building craft good taste, knowledge of design, restraint, and appreciation of simplicity; and with these qualifications, which would in time become traditional, we might hope for better things in the ordinary class of buildings for which no great architectural effort is needed. We might, in fact, hope to raise our ordinary street architecture to the level of that of the last century, when, without any affectation of architectural effect, the sober brickwork and graceful joinery, full of pleasant fancy and quiet imaginings, combined to make some of the most loveable homes in England. Above all, let there be no folly of certificating or labelling the student as proficient at any period of his career. Let him remain a humble learner all his life; and let the school be open to him at any future part of his history whenever he wants instruction or advice, or desires to freshen his interest by contact with younger aspirants."

MR. H. DE COLLEVILLE [A.]: Might I suggest that before settling on any definite scheme of education it is important that the duties to be undertaken or accepted by the profession as its legitimate share of service to the community should be defined.

From my own point of view I should like to see taken up as part of our profession all professional subjects both of art and science as usually applied to controlling the builder. If this were done all the subjects involved could receive equal consideration from the Institute, and educational bodies would arrange their teaching accordingly. This might perhaps require the Institute to be reconstituted and divided into faculties dealing with the various subjects, but I think that it should be impressed on the public that whether a man is connected with the high conception of planning or the science of structural engineering, he should be recognised as an architect. We should strive to show the public that the architectural profession is capable of exercising all the professional functions connected with building operations without recourse to outside professions and gain their respect and confidence by that method. For instance, I suggest that in the case of a scheme of national interest, such as a great bridge or other public improvement, it would be an asset if the Institute were able to furnish experts exclusively appointed from among their members, making the appointment of outside experts unnecessary. Collaboration among various architects, all experts in various branches of an intricate profession, would be in accordance with modern requirements and need not necessitate that those connected with the scientific side of the subject should be termed "engineers." We lose confidence in ourselves by the adoption of this term, while by allowing the educational side of such subjects as reinforced concrete to pass into other hands, we invite encroachment on our legitimate province of work. We have seen in connection with the present crisis that the Government have been inclined to discount the services of architects, and it is a regrettable thing that at the present moment, when so much building work is required for Government purposes, the Professional Employment Committee should have to find relief work for apparently unwanted architects, by placing them in temporary positions in other callings. If the Institute could be induced to interest itself in all the problems connected with building, including the engineering sciences which are developing on all sides, the educational bodies would be bound to reflect the views of the main body on this matter, and considerable scope could eventually be offered to young architects whose inclinations invite them to specialise in such subjects as reinforced concrete; and this would relieve congestion and thereby better the lot of those who are more gifted for planning and design, while at the same time it would shut out competition from commercial firms encroaching on professional work.

A proposition by MR. ROBERT ATKINSON [F.] that there should be a further meeting on the subject of Education, seconded by MR. PERCY B. TUBBS [F.], was put to the meeting and agreed to.

PROFESSOR LETHABY [F.], rising at the instance of the Chairman, said: To call upon me to reply is to put me into a difficult position. There is so much of the highest interest that has been said. I think we are nearing agreement: a large measure of agreement has already been expressed. I was delighted with Professor Simpson's speech, also with much in Mr. Jemmett's and Mr. Richardson's. I think Mr. Richardson calls art much that I call science. The concept that he talked about is of vast importance. Of course, we are all out after conception, but how is the conception to be reached? That is the point. It is not to be reached by wearing a tall hat, or by talking æsthetics; it is to be reached the last thing through knowledge, through analysis, and through training. I want the conception as much as Mr. Richardson does. To Mr. Jemmett I would reply very much in the same way. When one says science, he thinks one draws up so short. I do not mean the mere geometry of bisecting a straight line, or the mere mechanics of putting a cannon-ball on a lever, or the mere chemistry of building-stones, and that sort of thing; I mean the real science or real art of architecture. Geometry, for instance—we do not conceive how geometry should be applied to architecture; it should be the analysis of the geometry of what I would call cells. We should build up a real architectural science. This branch of geometry would deal with the analysis of simple chambers, the whole of the possibilities of the development of the chamber, branching out into the largest possible thing that can be dealt with—annexes, etc. And after you have had the science of architectural geometry (quite an infinite development beyond the bisecting of a straight line), in the same way you might have an architectural and structural mechanics. Beyond the geometry of the single cell or chamber, you would come to the geometry of what I call packing, the geometry of the association of the "cells"—French planning and Roman planning. It is all science, or all art; in fact, it is all the All! Because we do not use certain words which express all these things, it does not follow that we do not mean them. I am all, in the end, for emotion as well as conception. You will reach true emotion by not talking too much about it. This sham emotion of the ateliers is something which stands in the way, and when we have our training and the power it gives, a way will be open to us for our emotion.

MR. HARRY WILSON, who was asked to speak, said he would like to come to another meeting, and to say a few words, drawing attention to some practical suggestions.

THE CHAIRMAN said they would be delighted to hear Mr. Wilson, and they would put him down to open the discussion at the next meeting on the subject.

REVIEWS.

AFTERWARDS.

The Coming War. By Ambrose Poynter. 8s. Lond. 1916.
John Murray, Albemarle Street.

A man of reasonable modesty shrinks from recommending the class of education to which he was himself subjected. If discussion arises as to the comparative merits of different methods of training the young it is at least embarrassing to any man of good feeling to stand up for the particular kind of schooling which brought him to efficiency. If a man says, except in privacy or intimacy, "the best education in the world is the education which I received," he either has to save his face by alleging or pretending that he wasted his chances, or to leave his face unsaved and be written down as a boastful prig.

Mr. Ambrose Poynter has written a book which is full of interesting thought clothed in particularly neat English and adorned with just such a measure of classic allusion as can be interwoven among (rather than incrustated upon) a subject that is largely statistic, largely philosophic and mainly æconomic (I spell it with a diphthong for reasons which Mr. Poynter will understand). There is no doubt whatever that Mr. Poynter's book owes its good features, which are very many, to the fact that he was educated on lines which (purely, I believe, out of courtesy and good breeding) he condemns. "The training," he says, "of the principal public schools in this country is largely founded on a system which, though it cannot be called entirely obsolete, has become ill-suited to the majority of the boys who are intended to profit by it and which tends to endow the weaker-minded ones with a snobbish view of life." In regard to this utterance, which is followed by more in the same strain, I can only say, first, that Mr. Poynter is not one of "the weaker-minded ones," and, secondly, that if I were not hampered by the same considerations of decency I should say what I think about that "best of schools" which housed and taught Mr. Poynter and attempted to teach his present reviewer.

This code of modesty has, I think, its disadvantages; for if people who have been well educated (or even well taught, which is not the same thing) are pledged by the laws of good behaviour to decry that education (or teaching) in public utterances the very adroitness and cogency of which are due to the system decried we shall be sorely hampered in the serious discussion of the relative values of the different methods of instruction prevailing in our country. Mr. Poynter, if I understand him aright, complains that he and others were made to give too much time to Latin and Greek, that he was introduced to them at too early an age, that he was taught these "dead" languages in an uninteresting way, and that his after chances in life were hampered by insufficient, or negligible, training in book-keeping, shorthand and the manipulation of the typewriter. Judging Mr. Poynter by himself, I venture to say that he very obviously made his studies

in classic language as interesting to himself as he makes them to his readers; that book-keeping is not so deep a craft that it could not be pursued by him as a by-study; and that the accomplishments of type-writing and stenography could have been mastered by him (probably have been) as easily as billiards. Universal culture in typing during school and college years would in a couple of generations practically stamp out caligraphy, which, after all, is a graceful accomplishment and reasonably useful.

All I have here said is no condemnation of Mr. Poynter; it is merely a suggestion on my part that he has written a better book than he thinks he has, and that one reason of its goodness is the education which the author, out of pure modesty, affects to blame.

"*Fas est et ab hoste doceri*"—so the advocate of modern-side education begins; "from the enemy Britain may learn much, particularly in the industrial arts of peace." Mr. Poynter is no pro-German; he permits himself to endorse George Robey's successful outburst of description, "A bloodthirsty horde of super-educated savages," but he does wish to urge upon us the necessity of imitating after the war some of those methods of pushing commerce and encouraging practical science which led the Germans during the last forty years towards a pinnacle of commercial success which but for the outbreak of the war (imposed by them upon the world) would undoubtedly have been attained.

Mr. Poynter is quite right up to a limit. England has lacked push, has lacked the power to make the most of her own inventions, and has lacked also Germany's gift for appropriating the experience and initiative of other lands. Let us, therefore, learn from Germany, by all means, but it is fair to cap Mr. Poynter's Latin tag with a Greek one,—"*Gifts from the foe are giftless, profitless.*" There are some German virtues which we should be better and happier without even if we remain, for the loss of them, a little poorer and a little more like the stupid generous old England of the nineteenth century.

In the middle of the book there are some chapters entitled "Raw Material." They deal with England's man- and woman-power. If I mention that they are particularly statistical it will be understood (quite erroneously) that they are just the kind of chapters for the writing of which Mr. Poynter's typo-stenographically trained, modern-sided student would be specially suited. It amuses me to think of such a being in connection with these pages—pages into which the author glides with a couplet of Dante and out of which he emerges tossing a nosegay of verse from Theocritus. These chapters are very good and evince that study of social or rather citizen humanity which is obtainable only by living in the past as well as in the present.

Most truly does Mr. Poynter observe that England before the war was stratified in social layers of horizontal formation across which the war has driven vertical divisions of a less artificial and more natural cleavage. Certainly this image is a little forced, for

even the war classification has its horizontal beds, and even pre-war England knew divisions in the ranks of Britannie humanity which ran counter to the laminations of wealth and social standing. But roughly and broadly the observation is true and sound. The classification of men brought about by the war ran largely at right angles to the pre-existing severances of society. Mr. Poynter's suggestions and statements on this interesting upheaval stimulate thought and his readers are led on to go further into the analysis of war's social changes. I am driven for my own part to think that one of the happinesses brought by war to our citizen-soldiers has been the discovery of the pleasure of what may be called disciplined aristocracy. England for a long time had been suffering from the grave and inherent discomforts of what the French call *égalité*. The theory that every man is as good as his neighbour is mercifully untrue. If it were true the facts that made it true would obviously be fatal to all comfort and convenience in the life of the State. England had very largely subscribed to it, with the result, among other results, that in country districts the old benign and convenient control exercised by squires and magistrates has been largely superseded by the submission of the inhabitants to the rule of boards and councils which, except in so far as these boards are composed of the *personnel* of the old rural aristocracy, means that country (and country town) affairs are governed by groups of nonentities faintly swayed into the necessary activity by the alternate energies of their radical members and of the functionary who is their paid official. As far as the actual government of the community is concerned there may be no harm, there may even be good, in this *régime*, but its effect on the citizens themselves is immensely depressing. There are certain pleasures in governing, there are also very great pleasures in being governed; but the lukewarm sense of governing yourself through the medium of a group of counterparts of yourself, elected by a process in which you have so infinitesimal a share that you would not give up a game of golf to take part in it, can bring no intoxication to the brain of a patriot.

With this municipal and rural tepidity of government goes hand in hand a social torpor bred of the dispiriting discovery that, if you are as good as everybody else, everyone else is as good as you; and the flaming apocalypse which has burst upon many a voluntary (or conscript) soldier as he stepped from the horizonless plateau of kingship by equality into the subservient post of a private was nothing less than the glorious felicity of being ruled with unquestioned authority at the very base of a vast pyramid of graduated oligarchy. "This," he must have said, "is life indeed. Here am I in a live and glowing system. I may rise to intermediate power in it; I may become one of those who unite the privilege of commanding with the privilege of being commanded. In the meanwhile I am relieved of all responsibility except the

glorious, restful, simple and satisfying responsibility of obedience." To do them justice, their hot-headed joy was justified, for many of them had scarcely known beforehand the pleasures of submission. For the parents of the poor have but little authority and their teachers often teach what is called "independence."

To change the subject. Mr. Poynter in a clever set of pages on the epochs of England and their vicissitude exclaims that every man belongs to his own century and that every century is at its own time "up to date." How true this is! But I want to counter it by another truth. I like to think that when Aristotle defined man as "a political animal" he did not merely mean that every baby

Born into this world alive
Is either a little Liberal
Or else a little Conservative.

Citizenship indeed implies a city, and, with all due respect for the mutability of South American communities, it more or less implies a pre-existent city. Certainly, citizenship, or political existence, counts for more in an old than in a new-born polity. I believe that happiness among thoughtful people consists very largely in the sense that they are comrades, fellow citizens, or fellow religionists, with those who have preceded them. We all, of course, live on the edge of the ages, with the precipice of futurity in front of us; and as far as food and raiment are concerned, and dividends and New Art, we are obliged to take a front seat, with our feet hanging over the cliff; but the backward view over the plateau of the past is a fine view, after all, and the people who enjoy it most, who see it clearest, and live back into it, are not always the fools.

Mr. Poynter, I realise, makes his reviewer ramble, which is only another way of saying that he makes his reader think. He doesn't forget that he is an architect, either; after his second chapter, which closes with a quotation from Fanny Burney (I admire anyone who admires Fanny), he goes for London and London's failings. He hits boldly at our unrivalled powers of producing expensive bathos in architecture and town planning, and if I feel constrained to think that he sometimes hits too hard, or with misdirection, I can at least enjoy to the full his merry onslaught upon a certain centre of West End wealth where indiscretion, ignorance and apathy have punctuated their claims by a monument.

There are so many bright spots in the book that I can only touch on those I should like to commemorate. Such are his lively passage on the modern house; the contrast he emphasises between "furious and brief effort" and long-continued energy of a less demonstrative and obvious kind; his raps at the British workman, the civil servant and the Member of Parliament, and his comments on the German discovery that there is "good business" in art. In regard to this last I am ready to think that England has already begun to awake from sleep. Undoubtedly, one of the most striking developments that our generation has

seen has been the renaissance of beautiful lettering as a trade asset and the encouragement of good drawing (and colouring) for purely advertising purposes. Commercial architecture, too, has immensely improved during the last twenty years.

Finally, I should like to argue in a friendly way with Mr. Poynter on his suggestion that traditional art died out with the death of personal magnificence; I should like to insert Alfred Stevens alongside of Josiah Wedgwood in his page on the use of art in commercial products, just to show that the nineteenth century could do something in this line; I should like to reprove him very tenderly for calling the great Perkin "Perks"; and, lastly, I should wish to thank him very heartily for two evenings of very pleasant and profitable reading.

PAUL WATERHOUSE [F.].

AN AMERICAN GUIDE TO ARCHITECTURE.

The Practical Book of Architecture. By C. Matlack Price. Sm. 40. Philadelphia and London. 1916. 25s. [J. B. Lippincott Co., 16 John Street, Adelphi.]

A casual dipper into this American book, if an architecturally superior person, is likely at first to be "antagonised" by it. He will resent the author taking "the whole world for his parish" and "putting him wise" on all things—from the Græco-Baptist church of the early colonists to the splendid piles of West Point, from the ways of the Egyptians to the personal relations of twentieth century architects and clients. But a more careful study disarms him; he finds the book is not written for initiates, either masters or pupils, but for the great public, for clients not architects. Whether it is good for the great public to be encouraged to consider mysteries is questionable; it is apt to acquire an interest in unholy patent materials, to insist on particular "styles," and to make its architect wish it had no "taste" at all, beyond that so clearly manifested in the choice of a professional adviser. Perhaps, however, Mr. Price will do it good; his philosophy is on sound lines, and, though clothed in a new and different phrasing, one recognises in it the old wholesome doctrines of Ruskin, Morris, and Street.

The author of this guide to those about to build says, in his preface, that he "treats a subject never before presented to the lay reader in a direct manner." He treats it under two headings—"A Practical Guide to Styles" and "A Practical Guide to Building." In "Styles" we begin with a glossary, admirably illustrated from the point of view of the inexpert person, who will find a photograph of a Classic entablature, with the names of its parts written thereon, less repellent than the cold geometric examples of Chambers. We proceed then to scamper through the ages, being made to realise how Providence has gradually led up by way of Egypt, Greece, Rome, and the Middle Ages to the varied American manner. (Incidentally, while the critic may be unable to dispute that "most English examples of Gothic do not show the spontaneity of the style as practised in France," he will, perhaps,

feel that the instance illustrated, Wren's towers at Westminster, is hardly convincing in itself.)

When we have been whirled into modernity and America the pace slackens, and interest grows with increase of detail. "Colonial" architecture is described as being of two types—Early Colonial, a homely thing of clap-boarding and gambrel roof; and Classic or Georgian Colonial, corniced, porticoed, and pompous. We are informed of the Créole variant of Louisiana, a much-balconied, slender-pillared style, evolved under French and Spanish influences. We read of the "mission" manner of California, of the Anglo-Pennsylvanian type, and realise that American architecture, like American literature, is a product of locality. We differentiate between the severe classic of McKim, Mead & White, and the balanced festivity of the Beaux-Arts School. Finally, we learn that "the great modern English architects have their influence and that their names are Voysey, Lutyens, Bidlake, Baillie-Scott, E. Norman Shaw, and Dawber."

There is apparently no one "American style." How should there be in a land of such vast distances, varied climates, and a mixed race with a habit of observant travel? Like ourselves, our cousins did not follow the Continental "New Art" syren, and the "European secession" has but few disciples; one could wish it had more if the work of Frank Lloyd Wright, on page 198, is a typical example.

In the main, America, though given to coquet with strange religions, seems in architecture to hold fast to orthodox faiths. In domestic work she may be said to be almost timid, the business man being apparently much in fear of home criticism and greatly sensitive to the uninformed appreciation of friends. The "skyscraper" is, of course, the most definite Transatlantic product, and its great height and complexity present fresh problems. But even these are solved on traditional lines, generally Classic. There is, however, an increasing tendency to attempt what is described as "a Gothic motion." This appears in the West Street Building, the Liberty Tower, and the fifty-storied Woolworth building of New York. Mr. Price advocates, for æsthetic reasons, this use of Gothic (which he says is nicknamed "Perpendicular architecture"); he feels it suits the aspiring nature of these "cathedrals of commerce": possibly, too, the elimination of the great cornice, with its darkening effect on at least one floor, has its attraction for the practical mind. The newer type of tall building is planned with a "smoke proof" isolated staircase, approached by iron balconies from each floor, and there is a growing habit with building syndicates to purchase rights to light all round their sites. As a result of this the buildings are architecturally treated on each elevation, and New York is becoming a city of towers rather than of the colossal steps which have made Broadway into what has been described as "a convulsion rather than a street."

The second part of the book, the "Guide to Building," reveals difference between American and Eng-

lish procedure. A form of agreement between architect and client (issued by the American Institute of Architects) appears to be in common use. One or two of its clauses may be of general interest.

8. *Supervision of Work.*—The architect will endeavour to guard the owner against defects and deficiencies in the work of contractors, but he does not guarantee the performance of the contract. The supervision of an architect is to be distinguished from the continuous personal superintendence to be obtained by the employment of a clerk-of-the-works.

11. *Ownership of Drawings.*—Drawings and specifications as instruments of service are the property of the architect whether the work for which they are made be executed or not.

The American architect, too, seems more given, or more able, to employ specialists on his personal staff, specification writers, structural experts, supervisors, designers, and common draughtsmen! He uses $\frac{1}{4}$ -inch scale for working drawings and $\frac{3}{4}$ -inch or $1\frac{1}{2}$ -inch for details. He has, however, to be less lavish than his English brother with "sketches," for, to quote Mr. Price, "the average American client would expect to see his house completed before the English preliminary drawings were finished."

The "internal decorator," often a commercial firm, seems to be even a greater infliction than in England, and he deals with panelling, fireplaces, staircases and inserted antiques, as well as with tapestry, furniture and movable things; his activities are apparently more resented than those of the landscape gardener, who also flourishes.

Mr. Price gives some interesting information for the benefit of clients as to the relative costs of various types of construction in America. Assuming carriage to be in all cases the same, and the total expenditure 10,000 dollars—clap-board covered frame takes 945 for outer wall, frame and stucco 1,171, brick 2,217, stone 2,991, and "actual half timber" 3,491. One is pleased at the 3,491, for, though the American architect can produce a quite charming adaptation of an Italian villa, when he gets among "actual half timber" he is horrid! Over there they suffer, as we do here, from a lack of craftsmen who can be left alone occasionally to work out a building's salvation. I feel this most in Gothic work. Even in the fine churches of Cram, Goodhue & Ferguson the worshipper has to "endure hardness"; the unexpected seems to have been carefully arranged from headquarters, and the conscientious carver is felt to have seriously and faithfully carried out instructions to be quaint. The casual, unsophisticated, illiterate, poet-workman, who knew little about art and just enjoyed himself, has gone from America as well as England. "Education," machinery, unionism and commercialism have killed him. Can he be brought back to life, in a different form but with the same spirit, by the strong arm of the State or the pious efforts of societies?

To return to Mr. Price's book. Whether anything but the growing ages and the grace of God will lift up

popular taste is questionable, but this is an honest attempt, it is "very teaching," it will do the lay person, for whom it is intended, no harm, and both gentle and simple will enjoy the pictures.

HERBERT G. IBBERTSON [F.].

CORRESPONDENCE.

Gothic Construction.

Eagle House, Wimbledon: 21 April, 1917.

To the Editor, JOURNAL R.I.B.A.—

SIR,—In these short-handed days I have not till now found time to reply to Mr. Moore's letter in your JOURNAL of February. Mr. Moore holds to his contention that there is no Gothic short of Amiens, where construction by equilibrium of forces is pushed to an extreme, and voids increased at the expense of solids to the utmost. He excludes from the style all that had been done before during the Middle Ages.

With due deference to Mr. Moore I submit that this, which at first sight seems merely playing with words, really involves a serious fallacy. The construction which alone he calls Gothic was not a new thing or an entirely different thing, but the final stage of a gradual progress, of which we know every step. To understand the construction of Amiens you must follow the course of architecture from Vezelay, St. Denis, Sens, and Senlis downwards. There is no break in continuity. Through the whole period it was the very same Gothic genius which worked step by step till it reached the final scientific result which satisfies Mr. Moore. To say that mediæval architecture suddenly becomes Gothic at Amiens is like saying that a boy suddenly becomes human when he becomes a man. I can suggest no other word but *Gothic* to cover the whole period of transition from Romanesque. So far from the construction at Amiens being something new or different from what had gone before, it is but a refinement of that in the earlier churches, or, indeed, of that in the Basilica of Maxentius.

Mr. Moore objects to my claiming the wall-rib as part of the wall and not of the vault. He says that in the clerestory at Amiens there is no wall, and the intervals between the piers are mere intercolumniations. This goes too far. The nave arches and triforium are as necessary there for stability as in the older churches; the window itself, though reaching from pier to pier, is the descendant of the more solid clerestories of Chartres, Laon, and Lisieux, and its arch carries and belongs to the solid wall which rises above to receive the wall-plate. At Winchester the side walls have gone outwards, carrying the wall-rib with them and leaving the vault behind, so that one could look down into the Church between wall-rib and panel. There can be no doubt there of the rib belonging to the wall. So in ruins of Gothic churches where the vaults have fallen the wall-rib remains in the side wall. Many vaults have

no wall-rib, the vault resting just as well on a set-off in the wall. The wall-rib is only a sort of cornice, and an ornament, to break the meeting of wall and vault.

Mr. Moore further objects to my tracing the stilt of the wall-rib to the need of leaving space for the window, on the ground that it was stilted at Laon, Paris, and elsewhere, though the clerestory windows took no advantage of the opportunity to expand. That is, no doubt, true. But the narrow side arch has to rise at its crown to the level of the wide transverse arches, and if Mr. Moore will try to strike the wall-rib without a stilt in the earlier clerestories he mentions he will find it would cut across the windows, narrow though they be, besides being unsightly from the contrast of its acuteness with the other arches.

In conclusion, I contend that the great Gothic movement in art will never be understood so long as attention is fixed only on its effect on the vault. There are many elements in Gothic architecture, such as subordination of orders, window tracery, application of ornament and statuary, which have no connexion in the world with stone ceilings. Had Amiens been ceiled with wood we might still have had its glorious porches. Had no Gothic vault ever been turned we might still have had the great East windows of Lincoln, Carlisle, Selby, and York, the spires of Chartres, Norwich, Lichfield, Senlis, and Salisbury, and the towers of Lincoln, Gloucester, and Canterbury. Mr. Moore however will contend that these are not Gothic, and there I am afraid we must leave him.—Your obedient servant,

T. G. JACKSON.

The Educational Conference.

3rd May 1917.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Is there not some danger of getting out of touch with reality in these discussions? A vague approval is apparently obtained for ideas which seem to be contradicted by experience, and I doubt if the individuals present would be responsible for their results in practice. Take the proposal to control students abroad. I sat opposite to a student whom I recalled nearly thirty years ago at a foreign capital as grousing at the task his very mild and distinguished director had imposed. It was then a wearisome piece of theorising. Similarly I recall, years ago, a prize winner, who wanted a task, being allotted a building to measure which I always go out of my way to see, one which to-day is in favour. The student reported to the governing body that he had been to see it and "saw nothing in it to draw." Wisely, as I think, he was then told to do what he liked, and the result gave great satisfaction.

I agree that a student will waste time, but his after regrets need not be taken seriously; if he has anything in him at all he will certainly do some work, which will mean much to him, if not to anyone else.

I believe Palladio was mentioned. Well, James Adam wrote of his visit to Vincenza in terms which

almost agreed with those of Street nearly a century later. Barry, however, thought it worth while to hire a crazy gig and, in spite of bad roads and worse information, hunted up the villas except two. I know what that must have meant, as I have been along the Brenta and to Wasa myself.

Viollet-le-Duc's memorable letter to his pupil, who after did so much to elucidate Roman building, charged him to avoid the Villa Medici and its methods. I only recall these things to illustrate how much care and tact is needed in dealing with the natural bent and initiative of the student—there are surely limits to the very popular line at the moment, "compulsion."

A. T. BOLTON [F.]

EDWARD GREENOP [F.].

Born 1861; died 1917.

By the recent death of Edward Greenop the R.I.B.A. has lost a useful and valued member. He was the third son of the late W. C. Greenop, solicitor; was educated at Dulwich College, and articled to Mr. John Morris [F.], of Gracechurch Street. He was elected Associate R.I.B.A. in 1885, and Fellow in 1913.

Mr. Greenop was the architect of large warehouse buildings in Tooley Street, a block of business premises in Giltspur Street, "Deal House," Englefield Green, extensive decorative work at 4, Park Street, W., and 19, Charles Street, W., besides numerous other works, and had a considerable practice in advising on and giving evidence in building cases, arbitrations, &c., in all of which his help, skill, judgment, tact and courtesy were acknowledged by everyone with whom he came into contact.

For many years Mr. Greenop was a member of the Practice Committee, of which he was Hon. Secretary for five years and Vice-Chairman at the time of his death; and the Committee looked forward to his taking the chair, a position he would have worthily filled, as his opinions on the work of the Committee were always sound and helpful. A Paper written by him and read at the Institute in December, 1911, on the "Responsibilities of Architects," was full of valuable information and advice to the profession. On the various sub-committees on which he served from time to time he gave excellent assistance, and did much work, particularly in connection with the new scale of charges and the revision of the terms of contract, in each of which he took a very keen and practical interest, his help being especially valuable on account of his knowledge of the legal aspect of these matters. He was also an acting member of the Board of Examiners and a member of the Council of the Architects' Benevolent Society.

In the numerous arbitration and building cases in which he was engaged he could always be relied upon for sound judgment, and was a most thorough

and conscientious worker. His loss is deeply felt by the numerous friends he had made at the R.I.B.A.

From its inception Mr. Greenop was associated with the 4th City of London Regt. of Volunteers, a corps started at the commencement of the war and largely composed of architects and surveyors, and he acted as secretary, in which capacity he continued to act when the corps was merged into the 1st London Engineer Volunteers. It is to be feared that his devotion to this work seriously affected his health and probably hastened his end, as he had for some years suffered from a weak heart. He died from pneumonia, following a chill caught after returning from some regimental work. His funeral took place at West Norwood, and was attended by the Colonel and other officers of the 1st L.E.V.'s and by the Chairman and other members of the Practice Committee. He leaves a widow and one son, aged fifteen.

W. HENRY WHITE [F.].

ALFRED WYATT PAPWORTH [A.].

Few men map out their lives while still in their early youth and succeed in carrying out their programme practically unaltered, and it was characteristic of Alfred Papworth that until he enlisted in the Artists' O.T.C. in August 1915 he had followed the career he had early planned for himself.

The younger son of the late Wyatt Papworth [F.], the eminent writer on architectural subjects and Curator of Sir John Soane's Museum, he was brought up in an architectural atmosphere which no doubt influenced him in choosing the profession for which his talents so well fitted him. We first met in the same tent on Farnborough Common in camp with the Artists' Rifles in the summer of 1900, and the close friendship begun there continued without a break until his death. Even in those early days his energetic nature would not allow him to take advantage of the rest permitted to those who had been on sentry duty at night and he did the day's work with the others. At that time he was in the office of the late Arthur Cates [F.], Surveyor to the Office of Woods and Forests, and was attending the School of Architecture at the Royal Academy, while in the limited spare time at his disposal he worked at his measured drawings of St. John's Church, Westminster, for which he obtained the Medal of Merit in the R.I.B.A. Measured Drawings Competition 1901. These drawings have since been exhibited at South Kensington Museum as examples of measured drawings.

Having been elected an Associate of the R.I.B.A., Papworth carried out his great wish to travel, spending three years in South Africa as assistant to Mr. C. H. Read, and a further two years in travelling round the world, making his expenses as he journeyed from place to place. He crossed both Northern and Southern India and visited some of the ports of China before settling for a time in Kobe in the office of a German

architect, after which he visited the chief cities in the United States before returning to London, where he intended to start in practice for himself; however, after working together for some time on occasional competitions we entered into partnership ten years ago, and it was the writer's privilege to be in close daily association with him.

Devoted to his profession Papworth disliked intensely any interference with his designs by commercially-minded clients, particularly when he had achieved something unusually original, but if strained relations resulted he always gave way with one of the witty remarks which, with his charming personality, endeared him to all brought into association with him. Disliking what appeared to him to be the annoyance of the business side of architecture, his sense of thoroughness, which he always attributed to the influence of Mr. Arthur Cates, rendered his reports and constructional designs exceptionally painstaking and brilliant.

As a relaxation from the design of commercial buildings he entered into public and private competitions, although he rarely had the opportunity of completing his designs, but he looked upon the immense labour he devoted to his sketches as part of his training.

Always cheerful he had a smile and a jest for everyone, no amount of business worries depressing him, and he appears to have been just the same amid the miseries of a winter campaign, for his Commanding Officer wrote of him that "he was loved by his men and his brother officers for his kindly ways, his devotion to duty and his willingness to carry out to the last letter any orders received."

During the first year of the war he carried on our business much against his own inclination (the writer having been called up on mobilisation), but at last, saying he could stand it no longer, he enlisted in the Artists' O.T.C., where he had the chance of an appointment as instructor in map drawing. His sense of duty, which was very strongly developed, made him refuse this, and he chafed at the delay in being sent out, but after a period of special training, from which he passed out first in his class, he accepted a commission in the Royal Engineers. He was eventually sent to France at a day's notice on the anniversary of the date of his enlistment, and was attached to the 129th Field Company, meeting his death on 2nd April.

He did a considerable amount of work for the London Survey Committee, especially in the monograph on the Parish of Hammersmith recently published, was for some years a member of the Art Standing Committee of the R.I.B.A., Surveyor to the Licensing Justices for the division of Paddington, a liveryman of the Worshipful Company of Clothworkers, of which his father had been Master, and a member of the Savage Club. A tireless worker, he leaves the architectural profession the poorer by one whose great talents marked him out for a successful career and his circle of friends by a charming and lovable personality.

GILBERT H. LOVEGROVE [F.].



9 CONDUIT STREET, LONDON, W., 12th May 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-third List.

Fallen in the War.

BLACKBURN-DANIELL, 2nd Lieut. GEORGE FRANCIS [Licentiate], Royal Fusiliers. Killed in action on 24th April.

CALLENDER, Lieut. GEORGE WILFRED [A.]. Killed in action in Mesopotamia on 25th January last.

LOVELL, Lieut. CHARLES ERNEST [A.], Royal Engineers. Badly wounded on 21st March and died the same day.

SHEARS, REGINALD [A.], Queen Victoria's Rifles. Missing after an engagement on 1st July, 1916, now presumed by the War Office to have been killed.

Mr. Shears was elected an Associate in 1912. He joined the Colours in September 1914, was wounded in May 1916, and invalided home. Before returning to the Front in May last he was recommended for a Commission.

WARRY, Lieut. JOHN LUCAS [A.], Sherwood Foresters. Died of wounds in France on 27th April.

Lieut. Warry was elected an Associate in 1912. Joining the Artists' Rifles in the early days of the war, he was granted a commission in the Sherwood Foresters in July 1915. He served with his regiment in Ireland, and was on service there during the rebellion. Lieut. Warry was caught by a machine-gun whilst going to the assistance of a wounded brother officer during the action of the 27th April, and died on the way to the Base Hospital. His Commanding Officer writes: "Lieut. Warry was a brave man if ever there was one. He led his company right on to the German wire only twenty days ago, and came through unscathed. On the 27th his company were in the second wave, and I had hoped he would come through safely. If you could have seen the anxious way in which the men crowded round his stretcher you would have realised how they loved him. I should have sent in his name to-day for promotion to rank of captain had he lived, passing over others above him."

Members' Sons killed.

PEACH, Lieut. CRUGAR STANLEY, West Yorks Regt. and Royal Flying Corps. Accidentally killed on 28th April, aged twenty. Only son of Captain C. Stanley Peach [F.].

SOLOMON, 2nd Lieut. LEONARD, King's Own Scottish Borderers (Assoc. Member Institution of Electrical Engineers). Killed in action 23rd April, aged thirty-two. Son of Mr. Lewis Solomon [F.].

Serving with the Forces.

The following is the Forty-third List of Members, Licentiates, and Students R.I.B.A. serving with the Forces, the total to date being 74 Fellows, 518 Associates, 314 Licentiates, and 294 Students:—

FELLOWS.

Theakston, Ernest G.: Field Service Survey Coy., R.E.
Richmond, E. T.: Lieut., R.N.V.R.

ASSOCIATES.

Ellison, R. Kitching: Lieut., R.A.M.C.
Salwey, J. P.: O.T.C., Artists' Rifles.
Ebbs, E. H. Montague: 2nd Lieut., Roy. Garr. Art.
Goodwin, B. M.: Artists' Rifles.
Rowledge, G. H.

LICENTIATES.

Forbes, James: Lieut. and D.O., R.E.
Newman, G. J.: 2nd Lieut., King's Liverpool Regt.
Massey, Izmay: 2nd Lieut., Royal Flying Corps.

STUDENTS.

Sexton, G. W. F.: Survey Co., R.E.

Promotions and Appointments.

Hatchard-Smith, 2nd Lieut. W. H. [A.], Deputy Asst. Adj. Quarter-Master Genl., 5th E. Surrey Regt.
Dartnall, Cadet J. A. [Licentiate], to 2nd Lieut., R.E.
Owen, Lieut. W. S. [A.], London Regt., to Captain.
Naylor, Sub-Lieut. James S. [F.], to Lieut., R.N.V.R.
Nicol, 2nd Lieut. G. Salwey [A.], K.R.R. Corps, to Lieut., R.E.
Bond, Lieut. A. P. [A.], D.A.D.R.T., to be Captain.
Kenchington, Herbert [A.], Civil Service Rifles, to 2nd Lieut., Machine Gun Corps.
Bluhm, Capt. Q. Mangnall [A.], Manchester Regt., to be Major.
White, 2nd Lieut. T. Hansford [Student], son of Mr. W. Henry White [F.], to Lieut., Duke of Cornwall's L.I.
Woodward, Lance-Corp. Frank [A.], son of Mr. Wm. Woodward [F.], has been gazetted 2nd Lieut., R.E.

Architects and National Service.

In reference to the appeal recently issued through the Press to architects who signed the National Service Form N.S.V. 1, the Architects' War Committee understand that the forms filled in by professional men who make their status clear under the heading "(e) Occupation" upon the form, are referred to a special branch of the Service, with its headquarters in London and branches in the provinces. In the case of such professional volunteers, unless they specially state under heading "(k)" that they are willing to do other than professional work, they will not be liable to take up manual labour or other service of a non-professional character. Should any demand of such a nature be made in error, the volunteer is at liberty to require that his form be referred to the nearest Professional Classes Branch Office, where the mistake would be rectified.

As suggested by Mr. Neville Chamberlain, a list of the services architects could render in the national cause has been drawn up and submitted to the National Service Department by the Architects' War Committee's Advisory Council. Intimation has been received from the Department that all Government Departments have now been notified that such services are at their disposal.

The Annual Elections: New Nominations.

The following nominations have been made by members in conformity with By-law 33:—

As Members of Council.

CLARKE: MAX [F.].

Nominated by George Hubbard, William G. Hunt, W. Henry White, W. Gillbee Scott, H. D. Searles-Wood, Wm. H. Atkin-Berry, Sydney Perks, Matt Garbutt, David Barclay Niven, *Fellows*; Percival M. Fraser, J. Douglas Scott, *Associates*.

SUTTON: ERNEST RICHARD ECKETT [F.].

Nominated by H. G. Watkins, John Howitt, Robert Evans, A. Ernest Heazell, *Fellows*; W. Brandreth Savidge, W. H. Swann, William R. Gleave, *Associates*.

MACKENZIE: ALEXANDER GEORGE ROBERTSON [F.].

Nominated by H. D. Searles-Wood, Henry M. Fletcher, Robert Atkinson, Horace Farquharson, *Fellows*; Robert Lowry, Fredk. R. Hiorns, Ernest Bates, *Associates*.

WHITE: WILLIAM HENRY [F.].

Nominated by Matt Garbutt, Max Clarke, Fred. M. Marks, Herbert A. Satchell, H. D. Searles-Wood, Wm. H. Atkin Berry, David Barclay Niven, *Fellows*.

Attendances at Council and Standing Committee Meetings 1916-1917.

COUNCIL (10 Meetings).

Members of Council.—Ernest Newton, *President*, 8; H. V. Lancheater, *Vice-President*, 9; J. Alfred Gotch, *Vice-President*, 6; Sir John Burnet, *Vice-President*, 5; Paul Waterhouse, *Vice-President*, 7; Reginald Blomfield, *Past President*, 2; Thomas E. Colloutt, *Past President*, 1; E. Guy Dawber, *Hon. Secretary*, 8; S. D. Adshead, 6; Walter Cave, 6; H. P. Burke Downing, 10; W. Curtis Green (on service), 0; Henry T. Hare (on service), 2; E. Vincent Harris (on service), 0; Gerald C. Horsley, 7; J. J. Joass, 6; Arthur Keen, 9; D. Barclay Niven, 8; Alexander N. Paterson (Glasgow), 0; Andrew N. Prentice, 7; Harry Redfern (Government work), 0; A. E. Richardson, 2; E. A. Rickards (on service), 5; W. Gillbee Scott, 7; H. D. Searles-Wood, 9; Percy S. Worthington (Manchester), 2.

Associate Members.—Horace W. Cubitt (on service), 0; W. R. Davidge, 9; L. Rome Guthrie (on service), 0; Herbert Shepherd, 10; Philip E. Webb, 0 (killed in action); Herbert A. Welch (on service), 1.

Representatives of Allied Societies.—Graham C. Awdry, 0; R. Burns Dick (on service), 0; F. B. Dunkerley, 2; Chas. Kempson, 2; Adam F. Watson, 2; John Watson, 1.

Representative of Architectural Association.—H. Austen Hall (on service), 0.

STANDING COMMITTEES.

Art (4 Meetings).—E. Guy Dawber, 3; W. A. Forsyth, 0; J. Alfred Gotch, 1; Gerald C. Horsley, 1; Arthur Keen, 3; H. V. Lancheater, 0; Halsey Ricardo, 0; G. G. Scott, 0; H. H. Statham, 4; Edw. P. Warren (on service), 0; Robert Atkinson, 0; H. S. East, 3; L. Rome Guthrie, 0; Basil Oliver, 0; A. Wyatt Papworth, 0 (killed in action); Philip E. Webb, 0 (killed in action); Harry Redfern, 0; Harry Sirt, 0; H. P. Burke Downing, 4; Raymond Unwin, 0; W. A. Webb, 0.

Literature (4 Meetings).—Arthur T. Bolton, 4; D. Theodore Fyfe, 0; Andrew N. Prentice, 1; G. H. Fellowes Prynne, 0; A. E. Richardson, 0; E. A. Rickards (on service), 0; Chas. S. Spooner, 4; Arthur Stratton, 4; C. Harrison Townsend, 3; Paul Waterhouse, 0; M. S. Briggs (on service), 0; W. J. Davies, 4; Herbert Passmore, 1; S. C. Ramsey, 3; W. L. Spiers, 3; W. H. Ward (on service), 0; H. H. Wigglesworth, 2; C. E. Sayer, 4; H. A. Satchell, 3; H. G. Ibberson, 4; A. R. Jemmett, 0.

Practice (7 Meetings).—W. H. Atkin Berry, 7; Max Clarke, 9; H. O. Cresswell, 0; A. W. S. Cross, 0; Matt Garbutt, 9; Edward Greenop (deceased), 8; George Hubbard, 6; D. Barclay Niven, 7; H. D. Searles-Wood, 12; A. Saxon Snell, 4; Horace W. Cubitt (on service), 0; Percival M. Fraser, 13; Edwin Gunn (on service), 0; H. A. Saul, 1; J. Douglas Scott, 7; Herbert Shepherd, 6; W. G. Hunt, 8; Alan E. Munby, 6; Sydney Perks, 7; W. Gillbee Scott, 10; W. Henry White, 12.

* Includes attendances at Sub-Committees.

Science (3 Meetings).—H. Percy Adams, 1; R. Stephen Ayling, 0; A. O. Collard, 3; Alfred Conder, 2; W. E. Vernon Crompton, 1; Bernard Dicksee, 3; Horace Cheston, 0; F. R. Farrow, 0; C. Stanley Peach (on service), 0; R. Elsey Smith, 2; R. J. Angel, 2; H. W. Burrows, 0; W. R. Davidge, 1; G. Leonard Elkington (on service), 0; Digby L. Solomon, 2; Ernest Flint, 0; O. C. Hills, 1; N. O. Searle (on service), 0; C. E. Varndell, 0; H. A. Welch (on service), 0.

The Architects' Benevolent Society.

Mr. Ernest Newton, A.R.A., President of the Society, addressing the Annual General Meeting on the 12th April, said:—In moving the adoption of the sixty-seventh Annual Report of the Architects' Benevolent Society I am, I think, in a position to congratulate the contributors on much useful work accomplished during the year. In consequence of the war the Society has undertaken larger responsibilities and has done its best to fulfil them. I need scarcely refer to the peculiar conditions in which the events of the past three years have placed architects, to the existing building regulations and so on, which have so seriously affected architectural practice. The outcome of this state of affairs has been to cause financial stress to men who otherwise had no reason to believe they would be faced with the difficulties and anxieties of tightening purses. The Architects' War Committee, as you know, at the outbreak of the war sought to devise measures to alleviate these difficulties; the Civic Survey Joint Committee was also formed with the same purpose. An appeal was made to the profession for funds in the case of the former Committee, and the Civic Survey Joint Committee was successful in obtaining the financial support of the Government Committee on the Prevention and Relief of Distress. The money which has been received in both cases, amounting altogether to a considerable sum, has been administered by this Society. In addition to these spheres of activity there has been the ordinary philanthropic work independent of any causes created by the war. In connection with the general funds of the Society it is satisfactory to note that, notwithstanding the stress of present times, there was practically no falling off in subscriptions as compared with the previous year, while over £300 was received in donations. It has been the aim of the Council for many years to extend the list of subscribers. The result is perhaps scarcely a matter for congratulation. Certainly we could do with more general support; but the sustained loyalty of our general body of subscribers is a matter for congratulation. If we have not been able to add many names to the list of subscribers, we have, at any rate, the satisfaction of knowing that very few names have been withdrawn. It is a fact that our largest bequest and donations during the history of the Society have been received from those who have been most familiar with its sphere of operations. I mention this with a view to engaging the sympathy and liberality of those who have so far refrained from sending us their contributions. We all know how severely architects have suffered in consequence of the war; we also know that there are many architects whose practices have rarely been so profitable. I should like to make a very special appeal to these latter gentlemen, either on behalf of this Society or on behalf of the Architects' War Committee whose funds it administers. It is satisfactory



JAMES ELLIS BRAITHWAITE, *Associate*.
Private, West Yorks Regiment.
Died of wounds (see p. 12).



Lieut. JAMES BENNETT, *Associate*.
Royal Engineers.
Killed in action (see p. 78).



Corporal ROBERT VICTOR STURGEON, *Associate*.
17th Manchester Regiment.
Killed in action (see p. 78).



ARTHUR CYRIL CAUDWELL, *Licentiate*.
Private, Queen's Westminster Rifles.
Killed in action (see p. 29).

to know that the Society works in harmonious co-operation not only with the Committees I have already referred to, but also with the Professional Classes War Relief Council and the Artists' General Benevolent Institution. Successful co-operation of this kind is useful in preventing overlapping. It also helps to give assistance which extends beyond immediate financial aid. My last word in moving the adoption of the Report shall be again to appeal to such of our professional brethren from whom we have so far received no practical support to contribute to our funds, as I am sure they realise that contributions were never more needed than at the present time.

MINUTES.

At the Eighty-third Annual General Meeting, held Monday, 7th May, at 5.30.—Present, Mr. Ernest Newton, A.R.A., *President*, in the Chair; 24 Fellows (including 10 members of the Council), 10 Associates (including 2 members of the Council), and 4 Licentiates—the Minutes of the meeting held 5th March having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced that since the last meeting it had been reported that the following members had fallen in the War:—2nd Lieut. Alfred Wyatt Papworth, R.E. [A.], William Jackson Pywell, Hon. Artillery Company [A.], Lieut. Charles Ernest Lovell, R.E. [A.], Reginald Shears, Queen Victoria's Rifles [A.], 2nd Lieut. John Lucas Warry [A.], and Henry Eustace Adams, Rifle Brigade [Student]. On the motion of the Hon. Secretary, it was resolved that the deepest regrets of the Institute for the loss of these members be recorded in the Minutes, and that a message of sympathy and condolence be forwarded to their relatives.

It was also resolved that letters of sympathy be addressed on behalf of the Institute to Capt. Stanley Peach [F.] and Lewis Solomon [F.] who had recently lost sons in the war.

Further, the decease was announced of Edward Greenop [F.] and Walter Augustus Hills (for many years a Fellow of the Institute), and it was resolved that letters of sympathy and condolence be addressed to Mr. Greenop's widow and to Mr. Osborn C. Hills [F.], son of the late Mr. W. A. Hills.

Arthur Edward Gurney, *Licentiate*, attending for the first time since his election, was formally admitted.

The Assistant Secretary announced that the following candidates had been nominated for election:—As Fellows (5): John Wayland Benwell [A.], Percival Maurice Fraser [A.], Alfred John Healey [A.], Ernest Grigg Heathcote [Licentiate]; passed the Examination qualifying for candidature as Fellow, Colonel Alfred Spain, V.D. [A.]. As Associates (4): Andrew Blayney Hamilton, Wellington, N.Z.; Cecil John Harvey Keeley, Melbourne; Captain Basil White Ridley; Thomas Blair Moncrieff Wightman, Brisbane. As Honorary Associate: Joseph Pennell.

On the motion of the President, it was resolved that the congratulations of the Institute be tendered to Sir Ernest George, *Past President* and *Royal Gold Medallist*, upon his election as *Royal Academician*.

The President formally moved the adoption of the Annual Report for the official year 1916-17.

Mr. E. Guy Dawber, *Hon. Secretary*, seconded.

In the discussion* which ensued, the following members took part:—Mr. John Slater [F.], Mr. Wm. Woodward [F.], Mr. H. D. Searles-Wood [F.], Mr. Sydney Perks, F.S.A. [F.], Sir Aston Webb, K.C.V.O., C.B., R.A. [F.], Mr. W. R. Davidge [A.], Mr. Max Clarke [F.], Mr. H. Hardwicke Langston [A.], and the President.

Sir Aston Webb, Chairman of the Charing Cross Bridge Joint Committee, at the request of the President, replied

to criticism by Mr. Perks respecting the withdrawal of the Joint Committee's petition to the South-Eastern and Chatham Railway Company's Bill for the strengthening of Charing Cross Railway Bridge, and upon the motion of the President, seconded by Mr. Davidge, a vote of thanks was passed by acclamation to Sir Aston for the great amount of time and care he had devoted to the work of the Committee in relation to the above-mentioned Bill.

The Annual Report was then put to the meeting and carried unanimously.

A vote of thanks was passed to Mr. R. Stephen Ayling [F.] and Mr. A. W. Sheppard [A.] for their labours in connection with the annual audit, and Mr. H. A. Saul [F.] and Mr. H. S. East [A.] were nominated Auditors for the ensuing year of office.

The President referred with warm appreciation to the self-sacrificing labours of Mr. Alan E. Munby [F.], Colonel Leslie, Mr. Walter Tapper [F.] and Mr. Arthur Keen [F.] in connection with the work of the Architects' War Committee, and it was resolved that the cordial thanks of the Institute be tendered to them.

On the motion of the President a vote of thanks was passed by acclamation to the Assistant Secretary, the Librarian, and the Editor for their able conduct of the work of the Institute under the difficult conditions resulting from the reduction of the staff.

The meeting separated at 7.30 p.m.

NOTICES.

A GENERAL MEETING (BUSINESS) will be held Monday, 11th June, 1917, at 5.30 p.m. for the following purposes:—

To read the Minutes of the Annual General Meeting held Monday, 7th May, 1917; formally to admit members attending for the first time since their election, &c.

To receive the Report of the Scrutineers appointed to direct the election of the Council, Standing Committees, &c., for the year of office 1917-18.

To proceed with the election of the candidates for membership whose names are set out in the JOURNAL for April, page 152.

INFORMAL CONFERENCE, 16TH MAY, AT 3.30 P.M.—“Co-operation in Des'gn.”—Opener, Mr. A. R. Jemmett [F.]. Chairman, Mr. Alfred S. Cross [F.].

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* The report of the discussion will appear in the next issue.



THE CONTROL OF STREET ARCHITECTURE.

Discussion at the Fourth Informal Conference held at the Royal Institute of British Architects, 7th March, 1917.

SIR ASTON WEBB, K.C.V.O., C.B., R.A. [F.], in the Chair.

SIR JOHN BURNET, R.S.A., LL.D. [F.], opened the discussion by reading the following paper:

As most of you know, I am no reader of papers, and if I had been, I do not know that, of all the possible subjects of profitable discussion at a meeting of architects, I would myself have chosen "The Control of Street Architecture"; but the invitation came through the Secretary, and as I had been a supporter of the idea of these so-called informal discussions, I accepted the responsibility, realising, with some feeling of thankfulness, that the success of the meeting rested not so much on what I might be able to say as on those that followed me. For some time I was troubled as to what was meant by the "control" of street architecture. From what I seem to remember of discussions in these rooms, "control" was represented by the County Council, the Borough Councils and their officials; and frequently a third was suggested, as if in want of another antagonist, in the form of a Minister of Fine Arts, something in point of fact that should naturally be opposed by all true architects. Well, gentlemen, I have no theories to offer in regard to these authorities. There are, doubtless, some present who can speak for these authorities' mistakes and explain their ideals with a much greater knowledge of facts than I can. I can only address you as a practising architect, who for more years than he feels or cares to think about has been brought into touch with them in many towns and many parts of the country, and has recognised the essential nature of their functions, and, with here and there an exception, the invariable courtesy with which their officials exercised their difficult task. Sometimes I have been tempted to think that their experiences with architects might form interesting if not humorous reading. But in expressing my thoughts on the subject I beg you to believe that I am far less desirous to advance my personal views than to place the subject before you in a way that may lead to profitable discussion.

What, after all, is "the control" but the recognition by the people of the fact that if the citizen is to enjoy liberty in the erection of the buildings he re-

quires, he can only do so on lines which do not curtail the liberty of his fellow-citizens. That the town should be healthy, that the accident of fire in one building should not put surrounding buildings in peril, that one building should not depend on its neighbour for support (I was going to add for "daylight," but you have not got that freedom here yet), that in the streets all should have an equal opportunity of what the French call *réclame* without prejudice to those using the pavements, it is obviously the duty of a central authority to secure. It may find it necessary in the exercise of this duty to widen a street or streets, form open spaces, or even produce a scheme of "general improvement" involving joint consultation with an architect or an engineer; but the width of the improved streets, the size of the open spaces and the scope of the general improvement being settled, the ground provided has all to be occupied under the same laws or control.

The general character of the town or city must, I believe, be fixed, not so much by the individual buildings fronting the streets, as by the breadth of view and general foresight with which the "plan of improvement" has been conceived and the extent to which it indicates that its author has grasped its geographical and other essential conditions in his selection of prominent sites for its public or official buildings and the extent to which its streets and avenues can be improved. If I am correct in this, it is not too much to say that in their selection of an adviser and their wise discussion of his scheme the public authorities for the time being have a very great responsibility; as on their decision depends, not only the appearance of the town, but the health and happiness of its people and therefore the true prosperity of their industries.

It may interest you in this connection, and as showing that town councils sometimes feel this responsibility in their choice of an architect, when I tell you that the town council of Edinburgh in 1767, having had a competition for the laying out of the easternmost part of what is now the New Town, were so pleased, and relieved, by the plan of the successful

competitor, Mr. James Craig, that they presented him at once with the freedom of the City in a gorgeous silver casket, and also with a gold medal.

So long as there is no æsthetic control over street architecture, the interest and beauty of the street must depend upon the obvious integrity of purpose of the various citizens building on that street, the value they place upon art as assisting them in their aims, and their capacity to choose an architect who can throw himself with some enthusiasm into these aims, and express them—within the limits imposed by the central authority—in a cultured and artistic way. The width of the street, its plan (straight or curved), its levels, the position of the site in the street, or at the meeting of streets, the length of the frontage to the street, and the height he is permitted to build are all data which an architect recognises must control his design. I do not deny that such freedom would lead to endless variety, but if it were possible to suppose that each variety was designed by an architect of ability, or even by architects of similarly efficient training, there would be a sympathetic note throughout the buildings which any artist would recognise. If by chance there were buildings of poor or even bad design, might the street not be a more human and a more interesting place of resort for the citizens, and from their point of view be infinitely preferable to the finest uniform conception, which would but form an architectural screen exhibiting a similarity of purpose among the various proprietors which does not exist, and from which "the law" might ultimately allow them to escape.

It seems to me strange, that with the example of Regent Street, and the horrible process of gradual change which its present condition illustrates, and the example of many squares here and in other parts of the country defaced and now being defaced by this and that alteration, we, as architects, should still be even now talking of the "City beautiful" as to be arrived at by controlled or controlling designs. Let the city be controlled by laws of health, of safety of person and property, and in all that makes it a healthy and pleasant place in which men and women may exercise their calling, and let the architect who so plans it suggest the arrangement of sites for its public buildings, schools and other public services, parks and squares. But do not interfere with or attempt to control the buildings generally. In other words, if the authorities, so far as the improvement or extension of an existing town is concerned, have their monument in the scheme of improvement and extension they authorise, in the general lay-out of the streets and avenues, and in the position and design of the public buildings they find it necessary to erect, I think it is better that the citizens should be trusted to erect creditable structures for their own occupancy.

Businesses of all kinds are becoming every day more highly organised, to meet the necessity of competition in all varieties of public service. Their directors already demand that the housing of their organisa-

tions must, if economy of administration is not to be interfered with, be more simply and fittingly arranged, and are increasingly alive to the fact that the general style of their buildings, in the interior as well as the exterior, may produce that atmosphere which, I believe they already recognise, is an important element in their success, and I do not think it is too much to hope that with such clients architects can make noble and picturesque streets.

If you agree with me in my contention that such a course is the only sound one, sound in so far as it appears to me to be true to the instincts of our generation, then what part can this Institute, as representative of what we believe to be an essential public service, play in the scheme of general progress? I would suggest that if great architecture is the true and beautiful expression of the needs of the people, then we must study as citizens to appreciate intelligently these needs and the various laws under which they may be expressed. We will have then, as architects, nothing to do but to see to our ability to express them beautifully, and so I come back, as I fancy I was meant to come back, to the improvement of the Institute as an educational body answerable for the efficiency of its members in the public service and whose status, in the public estimation, depends on that efficiency and that alone.

In true appreciation of the spirit of the Middle Ages, let us be prepared to face with intelligent appreciation and enthusiasm the various problems of our generation, fearless of the forms demanded, and made possible to us by the variety of material and workmanship we now have at command. In so doing we will not only give our client what he wants, but retain for the craftsman that ever-changing application of his work which alone can give it interest and make it a pleasure to him. I still believe all good workmen know and enjoy their work in proportion as they recognise it to be a corporate part of a fit and beautiful building, meeting a definite and obviously useful purpose.

I would, therefore, submit that the only control required is by the Municipal or County Authorities, whose present laws and regulations should only insure what is necessary to the health of the city and the safety of person and property, and who should be responsible for the development of these laws as the advance in general knowledge may render necessary. On our part, as architects, it lies with us to accept such laws as we accept the requirements of our client as defined by him in consultation with us. This appears to me the only safe course, and the only one which can lead to sound modification of the law as its results are experienced in practice; as a profession we need not fear such laws being needlessly restrictive. No city, not even London, can afford to make and continue laws or regulations rendering it impossible for great merchants or others to construct what they require and what they can obtain in other cities without prejudice to the interest and safety of the public.

In 1876 a distinguished layman made the following remark in this room: "It must always remain for the architect to prove that architecture can keep pace with the utmost requirements of the public without sacrificing the governing principles of 'Proportion' and 'Beauty.'" We are living still in rapidly-changing times and it behoves us as members of a profession acting under ever-changing conditions to keep ourselves able, as the above quotation states, to appreciate the artistic possibilities of each change as it comes. That means high artistic training, which is only to be obtained as students by close study of the masterpieces of the past, but, having grasped the spirit in which they were conceived, let us apply the "spirit" and not the "letter"; trusting the faculty we have obtained for seeing the beautiful to grow as it is kept in use; keeping it refined not so much by the memories of the past, but, I would suggest, by keeping ourselves, as we do as students in the studio, in touch with the best work of our best fellow students, now our colleagues.

We have nothing to fear from control. It is not our business to doubt or find fault with it. We have but to do with the expression of it, as another item in the definition of each problem put before us.

I can hear the architect of the future say as he looks upon our cities, as regards the one, "they were poor architects then, but the avenues and streets of their time were broad and generous in their proportion and in their lay-out. If we had the opportunities they seem to have had, what might we not have done?" or, on the other hand, "It is curious that with their knowledge of sanitation they had such small ideas as to the value of sunlight and air; how poor their streets were, and how lacking in appreciation of what constitutes a healthy town. They seem to have grudged every expenditure on ground or space of any kind. Every square yard had to be built on as if every yard must give its immediate return in money, and yet how astonishingly beautiful and interesting each individual building is. They must have been good architects and splendid craftsmen. It is a pity that when the architects were so competent there was so little broad-mindedness on the part of the public."

MR. JOHN MURRAY [F.]: I would like to express my thanks to Sir John Burnet for putting this subject so very clearly before us. I gather from his remarks that the whole subject comes back to the individual architect and the education of the architect: and with that I am myself in entire accord; it is the conclusion at which I have arrived. My remarks will be restricted to some points as I see them from the estate point of view, and I regard some facts as more helpful than many theoretical views that we sometimes hear, that do not accord with fundamental principles. I do not, however, wish to criticise, but to try and throw some light into the dark recesses. The public, who are the patrons of architecture, especially those connected with street architecture, require from an architect in

these days all the essentials that form the framework upon which our finished art is based, and they include all those that our President recently mentioned and some others. But I fear the architect has been slumbering whilst other professions and new societies have forged ahead and done his work. There are necessarily some dominating estate conditions imposed upon building lessees, which include the use of certain materials, and these conditions have an important influence upon the architecture and upon the estate. There are, however, more universally, numerous owners of separate buildings that are not upon a single estate, and the street façades then become of varied hues with many buildings devoid of architectural merit.

It appears that this state of things, owing to the numerous ownerships, cannot be controlled except by the ability of the individual architects, and that can only be met by guiding and training whatever innate art our architects possess. In the case of large estates, where land is leased, the architect of each building or block of buildings is informed of the estate conditions which require harmonious treatment. The architect prepares his design for the building owner and submits his drawings, details, and sometimes models; they are considered and discussed with the architect by the estate representatives and modifications are frequently made.

The problem, due to the numerous different trades and building owners, is rather complicated, because practically each tradesman demands a building different from his neighbour's, and frequently one that is not in scale with the adjacent buildings. The designs of these are as far as possible brought into harmony, although the architect of the building sometimes supports his client's demand for a striking individuality of design without regard for his neighbours. This occurs universally in most streets, due to the separate ownerships and no estate control. In all cases, however, it is the individual architect of the lessee or building owner who is the projector, continuer, and completer of the design and all its details; he bears the responsibility for its æsthetic qualities, and it is his task to make a suitable design for the approved materials and all modern scientific conditions.

Estate control is a very different problem now from what it was a century or more ago: then businesses were much smaller, demands were more modest, individuality and specialisation of business had not reached by a long way the pitch they have attained to-day. In those days the estate architect designed practically all the buildings upon each estate. Now it is the practice for each building owner or lessee to employ his own architect, and the work is thereby distributed amongst the architectural profession; yet it is sometimes suggested that one should revert to obsolete customs. That is, however, impossible to-day; the rights of the public and the conditions of modern life will not permit it.

A modern architect, in order to practise his profession successfully to-day, should combine a full

knowledge of art, science, and finance as applied to architecture, the last not being the least essential from the patron's point of view. The art might be represented as the fruit, the science as the branches, and the finance as the roots, and unless we possess sound roots and branches we can never obtain the best fruit.

Although stringent restrictions are placed upon advertisements on some estates, there are also very many separate owners who impose no restrictions. Even with stringent restrictions it is difficult to restrain the ingenious devices of the advertising mania, especially when ugly letters and things are placed on portable frames and stood inside the glass of the windows. A heavy tax might be a deterrent, or the architect might convert the desecrator by providing a reasonable surface designed for the purpose.

General architectural advancement appears to me to have progressed too slowly in this country during the last 35 years, since I first acquired knowledge of the systems at the Royal Academy Schools, the Architectural Association, and, later, at the Institute Examinations. For instance, there are now various new materials awaiting new designs to suit them, but little seems to be done by architects to solve the problems, and I feel that some collective guidance is needed in this respect. I conceive that by the aid of sufficient assistance and training, which might, perhaps, be afforded in a greater degree by this Institute, a better and more universal control could in time be established.

Architecture is a progressive art, and it needs creative framework to sustain its life. The collective outlook has, I consider, been too narrow hitherto. Although it was laid down for architects in the year 1834, at the foundation of this Institute, that they should embrace "the whole circle of the sciences," yet we can hardly assert that our guiding policy has, or that we have collectively, accomplished this wise tenet to-day. Architectural perception does not appear to have kept sufficient pace with the rapidly changing times, with the result that there has been a tendency to the alienation of architectural sympathy with modern progress, and consequently a lack of general support of the educated architect by the public—hence inferior art has run rampant.

We see how the Great War is shattering nearly all our preconceived and limited ideals in other spheres, such as industry and science; it should not, therefore, be too much to hope that architects will keep pace by organising, teaching with complete equipment, attracting the interest and support of the public and all branches of work allied to architecture, and thus inducing all to work for the common good. I am of opinion that the realisation of this great work is possible, and only when it is fully accomplished will architecture be universally improved and controlled in this country.

MR. A. E. RICHARDSON [F.]: It is not inopport-

tune to say that the aspect of London to-day is that of a provincial city, for with the exception of the older portions, such as the streets, squares, and parks developed in the seventeenth and eighteenth centuries, with certain public buildings belonging to the last century, the chaotic element persists. The question is no longer controversial, for the stage has been passed when the body of opinion voted for individualistic freedom in design as opposed to well-regulated systems of consistent architecture. From the time of the Great Fire to the late 'fifties good taste controlled the development of the residential districts; while the public buildings compared favourably with Continental practice, and even the shopping centres were interesting, both as regards scale and general uniformity. The cause of the present trouble can be attributed to the unprecedented prosperity of the second half of the nineteenth century up to the past decade. It is comparatively easy to reconstruct the past and to get behind the conventional scenery of the seventeenth, eighteenth, and nineteenth centuries, and to draw conclusions from the taste of those who preceded us, but beyond a certain point such examples offer few suggestions for the control of street architecture to-day. We have the works of the Brothers Adam as examples of how the architects of the late eighteenth century approached the problem of providing accommodation for various classes in the superior residential areas. The guiding factor in that case was comprehensive street design with buildings formed into complete yet separate compositions. The speculative builders, landlords, and architects who flourished during the Napoleonic wars extended the theories of these ingenious Scotsmen. Then came the age of Stucco, and what Carlyle termed the acrid putrescences of Belgravia, but we have since come to regard the abilities of Nash and his school in a different light. Even Nash had his difficulties in getting his scheme for Regent Street carried to a successful termination, but up to ten years ago it was the best shopping thoroughfare in London. Perhaps this is proof of how street architecture properly controlled, as it was when the Committee of Taste exercised their functions, can be developed.

London does not suffer from a poverty of interest; the chief fault is it is overdressed. There is such a variety of picturesque attributes, all clamouring for notice; such a plethora of advertisements, as well as a strange mixture of coloured building materials to confuse and detract from the dignity of the important streets.

It is curious how the various business interests have automatically adjusted themselves to certain areas. There is a shipping centre such as Leadenhall Street where the offices of the shipping companies are situated; a bankers' centre, such as Lombard Street, King William Street and Moorgate Street; great shopping thoroughfares similar to Cheapside, Holborn, the Strand, Regent Street, Bond Street, and Oxford Street; manufacturers' centres like the ill-favoured Queen

Victoria Street, and engineering thoroughfares akin to Victoria Street, Westminster. Besides this list numerous other instances are extant of different trades consorting in specified districts. Such an analysis should prove of value to a controlling authority when giving consent to new building schemes. Moreover, it should be possible to hint at the character of such businesses in the new works.

It is not our affair to enter upon a discussion of historical examples this afternoon, but to summarise the various suggestions put forward, with a view to their adoption by the authorities who now control ordinary building practice.

It should be just as simple for these authorities to frame regulations governing the height of buildings and architectural sequence of treatment, both as regards the main lines of collective designs, as well as materials, as it is to regulate the thickness of walls and the observance of sanitary regulations. At present excellent rules are in operation dealing with building lines in a horizontal direction at the street level. Surely something can be done to extend the principle to apply to silhouettes and sky-lines. At present, owing to the absence of a controlling authority, the first architect on the scene who is commissioned to design a small front in an old street has it in his power to mar the amenity of a district. In this way streets which a few years ago were ordered and uniform are slowly becoming architectural exhibitions. The late Mr. Phené Spiers once remarked to me how much he regretted the passing of the comprehensive composition in street architecture; we were turning over some old engravings and admiring the simplicity and ordered arrangement of individual houses into lengthy fronts. Mr. Spiers remarked, "the craze for individuality has killed all desire for good taste, and perhaps we shall never see such fine work again."

I would suggest that the control and co-ordination of architecture, in so far as it applies to the streets of London, should be vested in a Government department with this reservation—a jury consisting of eminent architects elected annually by the Institute, and acting in an honorary capacity, should advise the department on questions of expediency and good taste. In addition to having to satisfy the requirements of the London County Council and the District Surveyor individual architects would submit their proposals to the jury for consideration and recommendation. The fact that the jury would be elected annually, and that its *personnel* would be voted into position by the members of the Institute, would ensure its working without friction. The jury system is in operation in Paris, and from all accounts works well. It would not entail any hardship or additional labour to the architect, and in many cases would serve to help him to overcome the idiosyncrasies of his clients.

PROFESSOR W. R. LETHABY [F.]: Some definite control might and should be exercised over obvious abuses, like plastering street fronts with advertise-

ments and letting frontages become too dirty and run down. Beyond clear abuses, however, I do not think much should be attempted in the way of absolute rules. It is our business in some way to educate the public sense of architects themselves and also of all citizens. This might be best done by setting up a strong committee on London buildings, a committee for propaganda, for collecting data and for advice. It is hardly sufficiently realised that this Institute has some functions which are more or less Imperial, some which are National, and some which relate especially to London: it is the local society of architects for the metropolis. I would have such a committee inform itself of the facts in regard to our public places and streets. It might bring pressure to bear for the improvement and cleaning of our railway stations and all public buildings. For instance, while avoiding the wild and violent suggestions which have been put forward for altering Trafalgar Square and the National Gallery, we should attempt to get the untidy accretions already on the roof of the Gallery before the war cleared away or screened in a modest way. We should enquire how the dreadful lamp-posts and railings we see are brought into being. A higher degree of competence should be exacted in all public works, and these, at least, should be reasonably criticised. Much might be done, I am sure, in this way by trying to remedy obvious wrongs without raising controversial questions. Then by way of papers and discussions other matters might be cleared up, and put on record, like the best solutions of the shop-front problem, different workable types of skylights and windows, and so on. I venture then to make this definite proposal, that the Institute, as one outcome of these conferences, should appoint a committee with a view of improving London architecture. It should deal with the whole question of buildings much in the spirit in which the London Society deals with questions of planning. The Institute should bring building authorities into conference, and should be in closer touch with the Government in all matters which concern building. It must attempt to get something done.

MR. C. FITZROY DOLL [F.]: It seems to me that, if the Royal Institute of British Architects is to do its duties as it should, we ought to have better representation in the Houses of Parliament. During the many years I have watched the House of Commons the number of architects who have sat there could have been counted on the fingers of one's hands. One eminent man who sat there was Sir William Tite. He did do something—he helped architecture in the House to a certain extent. But what we want at the present time is a gentleman like yourself, sir, and Sir John Burnet, and other members of the profession, in the House of Commons, in order to press home before the House all these questions. I can speak, as to some extent connected with one of the largest estates in London. What is the experience there? A man

enters into a building agreement. The estate desires in every way that what is done should be carried out in accordance with the best endeavours of our art. The drawings are submitted by the lessee, and I or a colleague call his attention to the fact that the whole of the building rests on a shop front with brass or bronze rods supporting it, and suggest that he should have some pilasters or columns to carry the superstructure. To this the lessee replies: "I am going to spend £20,000 on the estate, and I want to exhibit my goods, and if you take off so many feet superficial of glass I shall have so much less space in which to show my goods. I am a man of business, and do not care a straw about your architecture. I want all the glass space I can get." I insist. He complains to the steward, and the steward sends for his architectural adviser. "Look here," he says, "I quite agree with your objection, but we cannot stop this man, as he knows best what he wants for his business. It is a pity and an outrage to my architectural sentiments, but do the best you can with him." I think the worst authority to deal with an art problem is the London County Council. If authority were given to the Institute to set up a Committee of Architectural Taste, and each of the Borough Councils were to have the right to consult the Committee, we should, perhaps, get something better. Speaking for the Borough of Holborn, I recollect perfectly well laying down the lines of Kingsway, with my friend Wyatt Papworth, long before there was a County Council. In planning that road it was found absolutely necessary to get rid of Clare Market and its contiguous slums. The scheme came before the Metropolitan Board of Works in 1882, five years before the London County Council came into being. When the County Council sent the Holborn Borough Council their drawings of the proposed Kingsway, it may not be generally known that the upper part, that north of Holborn, was shown half the width of the southern part, and it was only owing to the pressure put upon them by the Works Committee of the Holborn Borough Council that it was brought to its present width. There were several Fellows of this Institute on that Committee, and you may be sure that it got a good deal of consideration. Yet the County Council would not give way at first, and they proposed to leave standing all the old buildings on the west side of the upper part of Southampton Row. New specifications were prepared for reletting the existing buildings, and all the alterations were made to those houses, and new leases were granted. Then, all of a sudden, the County Council realised that a mistake had been made with regard to the curve that was necessary to get the tramway from Theobald's Road down into the tunnel under the Kingsway. The leases had to be bought of most of the old houses on the west side and the expenditure just made on them sacrificed. Hence resulted that ugly set-back on the west side in order to get the width of the roadway in the upper part of Kingsway. Had the Borough Council been consulted such a thing would

never have happened; it was only owing to the pressure of the Borough Council that Kingsway has turned out as well as it has. It seems to me that the only thing to be done is to press upon the authorities the advisability of giving the Institute powers to act with the different municipalities where any improvement or work in the nature of a new street is being made, so that the work may be carried out under sensible control impelled by local pride. Of course, in the old days, the ground landlords of London had powers which, owing to the action of democracy, they have lost entirely now. If they want to let their land they have to give way to the requirements of the tenant. I feel sure that the large landlords of London would be only too delighted if there were some properly constituted authority to assist them in bringing about the better architectural treatment of the streets and buildings on their estates.

MR. H. V. LANCHESTER [F.]: I would like to make one or two brief remarks. I do not want to go into the practical aspects, but there seem to me to be some basic factors which we want to get clearly in our minds in regard to questions like this. It has been brought to my mind by the slight conflict of view with regard to control that London is halting between two views on architecture. Take the view that the architect has a site 200 or 300 feet square, and has to put up on it a block of offices or a town hall. He goes to work and models his buildings as a whole. Many of our commercial blocks in London are not much bigger than that, but nobody ever seems to get the idea—or if they do it breaks down—that these blocks should be modelled and grouped as a whole. Mr. Richardson evidently has that in view; and there is much to be said for it. I do not see that the legitimate requirements of business are so different, when you have given a height limit such as we have got, that there should be any difficulty in regard to a block of business premises such as the one abutting on Regent Street and Conduit Street here, considered as one block, with a number of occupations, but with one architectural treatment. "But," the other side say, "you have got the chance of individuality, you have the interests of the different fronts, and each man can consult his own tastes. We have good examples from the Netherlands and such places, streets where each front has something individual and charming in itself; why force us all to combine in one group?" Both can be accepted, but you must make up your mind one way or the other. In London we seem to be trying both, and if you try to do both in one area the result is not good. Take some of the Netherlands towns—they have got one ideal in vogue in one part of the town, and another ideal in another part, and you feel the discrepancy in going from one part of the town to the other. But that is not as bad as the discrepancy when the two ideals are in adjacent streets. You find an effort to make fine combined groups, with a façade; then you turn the corner and see before you

gables and individual features or 25-foot frontages. If both these methods are right, we rather want to segregate them. Though that is not an ideal solution, it is the best we can do under the circumstances. And I would like to ask for a little differentiation between the legitimate individual requirements and the requirements of what I may call the purposes of advertising. I am not referring in the least to advertising by lettering, but such, for example, as the case where a client will desire that his building shall overshadow, either by height or by richness or in some other way, those of his neighbours: he says, "I am here to draw the public: I want to advertise my business, and by some means or other I must do so." That seems to me, relatively, a rather vicious requirement, in contrast with the requirements of others that they shall have sufficient light, air, and convenient arrangements for the conduct of their business.

With regard to the question of the shop front, in a paper I read sometime back I tried to analyse it and concluded that, given the necessity for a full shop front, there were four distinct ways of getting a full-width shop front consistent with sound principles in design. You could make the whole façade a shop front, you could project the shop front and make it an extension of the building, and there are two other alternative methods. The shop-front difficulty is not, to a real architect, by any means an insuperable one. Such regulations as we have at the present moment are mainly injurious. I have seen on the Continent a building all shop-front. It was a successful building architecturally, but our regulations would not permit such a structure. Then there are regulations which arise in connection with walls, regulations dealing with new materials, and regulations with regard to height, which are all, I think, more or less injurious. If differently framed they might be beneficial. For instance, regulations do not take into proper consideration the width of streets. There are certain rules, but these do not conduce to architectural proportion in streets. If you take streets where the height of the buildings is the same as the width of the street—and that is often the result of regulations in the wider streets—there is a most ineffective street picture as compared with the broad street with low façades or the narrower street where buildings are much higher than the width of the street. Regent Street with the new height of building will no longer convey that sense of spaciousness and dignity that it did in the case of the old one; when you add 60 per cent. to the height of the buildings it alters all your proportions. You may say we shall get our eyes accustomed to the new proportion, but I am not so sure of it. There is a certain basic feeling in proportion, and that will not admit of a street satisfying you in which the buildings are regularly uniform and near in height to the width of the street: they are better a good deal more or a good deal less. I do not want to labour these points, but I think we shall clear our minds if we get some basis for the questions we are arguing on.

PROFESSOR S. D. ADSHEAD [F.]: I would say a word on this question, rather from what I may call the town planning aspect. The real basic issue has not been touched. I feel it is a question which is very deep-rooted in the social fabric, that it is not all a question for architects. Architects are so much in the hands of the public. We are not living in the age of Louis XIV., those Royalist days when we got great compositions; nor—to go to the opposite extreme—are we an American city, with a perfectly symmetrical plan, but an absolutely chaotic series of elevations without a single composition anywhere. We are dealing with a town which might be described as originally composed of areas constructed under an aristocratic régime, and possessed of a large amount of considered composition. Ought we to attempt to continue, under our democratic conditions, any effort to arrive at composition in the streets? Mr. Lanchester has pointed out that the Belgian and Dutch towns have, in the older parts, picturesque areas, and areas which are well composed, both of which are satisfactory. Assuming, as Sir John Burnet hopes in his idealistic paper, that the architecture is so improved, and architects arrive individually at such a stage of development that we can get a picturesque town which will be of value, then there is something to be said for that. But that, to my mind, is in the far distance; we should do better, in the meantime, to rely upon a little control. Control of the architecture is wanted, and, as Mr. Richardson pointed out, control not only of façades but also of the kind of building which should go into certain areas. For instance, is it to the benefit of that portion of Tottenham Court Road which adjoins Oxford Street that there should be in close connection three such buildings as a jam and pickle factory, a Young Men's Christian Association, and a brewery? But that is not exactly control of street architecture. With all the difficulties one can foresee in setting up a Ministry of Fine Arts or some authoritative body of the kind, I think it is well worth while making some sort of attempt. I think the Institute could not do better, on the lines which Professor Lethaby has laid down, than give during next session every consideration to this matter, and endeavour by way of propaganda and meetings to arrive at some conclusion as to what the Institute could do. No better suggestion has yet been put forward than that of Mr. FitzRoy Doll, that one or other of our members should enter Parliament.

MR. H. H. WIGGLESWORTH [F.]: There are two points of view which Sir John Burnet and Mr. Richardson have laid down—the individualistic as compared with the communistic control—and it seems to me that any discussion is likely to take one side or the other. Most of us think a happy medium might be found to meet the case. As far as Sir John Burnet's theory is concerned, there is no question that the individual may come under communistic control. Take the case of such an undertaking as Selfridge's:

there is control of a tremendous number of individuals and there you get the communistic idea. When it is left to an individual to carry out a scheme for such a building there is a chance of getting something big. But, after all, the uncontrolled individuals are innumerable as the sands of the sea, and it is these smaller fry which cause what Professor Lethaby terms such an objectionable litter in our streets. If by some means we could influence these small fry to strive for something better we should certainly endeavour to do so, and if we could bring to the notice of the individuals the views of a body such as our Institute it should have a good influence, even if we did not see our way to support a Ministry of Art.

MR. A. R. JEMMETT [F.]: Could not the Art Committee of the Institute take up the job?

MR. W. A. FORSYTH [F.]: As one who was Secretary of that Committee for many years I can give a brief answer, and that is that every time the Art Committee wanted to do anything the Council would put it on one side. I would utter one word of warning. This is the legitimate work of the Institute, and it should take up the matter. We have not been doing it. The consequence is you get the London Society, the Concrete Institute, and other bodies which are cropping up, taking the work out of our hands. If you appoint a committee I would do my best to help, in clerical work or in any way I can. I think the result of this Conference will be to establish some sort of committee of that kind. It is rather early to discuss whether we are to have control, or whether we are to have some freedom in architecture; whether we are to discuss the crystal palaces which Mr. Lanchester described, or other buildings. But I think the first thing the Institute ought to do is to put its house in order and get to work. It should take up a courageous policy and never mind about making mistakes—it is bound to make mistakes, and this Institute has been afraid of making mistakes in the past, and has consequently done nothing for architecture, although it may have done much for architects.

THE CHAIRMAN: I am sure we have had a very interesting discussion, and I hope it will lead to some result. Personally, I should think that, although there are many committees already at the Institute, this is so important a matter that a committee of the sort suggested might be recommended. At any rate, I hope this Conference will represent to the Council of the Institute their opinion that this is a really urgent matter, and not only to architects but to the City and everybody who lives in it. Professor Lethaby has often spoken of civic pride, and I think this civic pride is what we have to try to stir up amongst the inhabitants, not only of this but of every other city, some pride in their city. When you do that the whole thing becomes easy. At present there is very little civic pride. Perhaps you will say there is nothing to be proud of. I do not agree: we have much to be proud of. And if we point out desirable improve-

ments to people it is surprising to find how much they wish to see them carried out. Yesterday I was at a joint committee meeting of the London Society and this Institute. Both are working on the same thing. The Institute is necessarily a body of architects; the London Society is attempting to interest others than architects in London, and I think the London Society is attempting to support the Institute by spreading further than the architectural profession this interest in architectural questions. I am glad to say that we have always worked most cordially with the Institute.

With regard to what Mr. FitzRoy Doll was kind enough to say, Sir John Burnet and I feel very much complimented that he should have suggested us as Members of Parliament. I do not know that our ambitions lie in that direction; but what did strike me as curious is that yesterday we were looking about to see what influence in Parliament we could get for the Institute and the London Society. We have twenty-five Members of Parliament who are more or less interested in Art and Architecture, and these have formed themselves into a Committee; when anything comes before the House of Commons of that nature, we write to them, and they do their best to secure some consideration for the subject. It is a small thing, but it is something, and if more could be done in that way I think we should move matters forward. Looking through the Institute list we find a number of distinguished Honorary Fellows and Honorary Associates, but hardly a single Member of Parliament. I think we ought to exercise some influence; there must be a considerable number of architects who know Members of Parliament well, and who might persuade them to join us as honorary members. This would add greatly to our strength. There is no doubt, if we are to be an Institute of far-reaching influence, that we must exert our influence out of doors, so that everybody who is interested in the amenities of our towns should look to the Institute as a body from which they could get advice and assistance. I am sorry Mr. Riley, who was to have spoken at this meeting, is not present, because I am sure he would have put up a good reply to Mr. Doll with reference to the London County Council. I happen to be an Alderman of Kensington, and I know something of the difficulty there is in getting anything done through any of these bodies. When I joined the Kensington Council I thought I would try and see if anything could be done in the way of more reasonable treatment of trees. We have got at Kensington almost a forest of trees if they could be put together; but they have been sadly neglected. Going down some of the most important roads you will find a gap, and then a tree 50 or 60 feet high, then perhaps two gaps, and then a tree 25 feet high, and so on throughout. I have brought this matter up frequently, but little has been done, although the Council were good enough, on my urgent request, to ask a distinguished man who really understood trees to report as to the best way of planting them, the best trees for the purpose, and

the best way of controlling the height. He drew up an excellent Report, which was published, and since then we have obtained a proper man to supervise the trees. So we have done a little, though I am afraid that if you went through Kensington you would say there was plenty of room for further improvement. My idea is that trees in streets should never be allowed to grow much over 25 feet high. With the ordinary width of pavement, if they are beyond that they become troublesome. The expert I spoke of told me one thing which I thought very interesting. As you control the tree at the top, he said, you at the same time automatically control the tree at the root. So the trouble of trees with long roots getting into drains, and causing other difficulties, is controlled by attending to the height of the trees.

With regard to the general control of buildings, I am afraid I am rather for more control than some of the speakers seem to be. I think everybody working under restrictions is helped, rather than the reverse, and that the restrictions which are put upon us, partly by our clients and partly by local authorities, are often merely a stimulus to exertion to try to meet the problems which confront us. Although Sir John Burnet seemed, I think, rather to oppose control, still he mentioned that very beautiful part of the New Town of Edinburgh where, apparently, control was very strictly and, as I have always thought, most successfully carried out. Professor Lethaby also, I think, was not altogether for control, and yet he brought forward an example which has always burned in my mind whenever I walk up Whitehall. I refer, of course, to the National Gallery and the extraordinary excrescences that are allowed over the roof. There

should have been some public body to prevent that. We know how it arose. There was a competition for a new National Gallery, and the architect was entrusted with the work. He went on with some of the Gallery inside, and threw up the dome over the crossing, supposing that his façade would be built later on. But the Government never got further than that small portion of it.

Another thing, the control of buildings in streets, would seem to depend entirely upon the width. Narrow streets and irregular streets obviously do not want a cornice fixed for them, and there should be a certain amount of play of outline and variety of design. But in the case of a great public thoroughfare the conditions are reversed: there should be certain lines laid down, and all who occupy the street should be expected, or, if you like to say so, forced to follow. That, I think, is necessary.

The other day I was looking into Walter Besant's *Old London*, where he gives an account of the Great Fire. After the Fire, he says, Sir Christopher Wren laid down a plan for the rebuilding of the portion that was burnt, and then he goes on to say that fortunately this was not carried out, and they rebuilt in the old picturesque manner of before. That shows the different views of people. It seems to me, in a great City which is the Capital of an Empire, that dignity is more appropriate than picturesqueness, and spaciousness is more to be desired than pretty buildings. I think we have had a very interesting discussion, and, if you like, I will propose that we send a resolution to the Council of the Institute, asking them to take this matter in hand, and to consider how best the views which have been expressed here to-day can be carried out.

WALTER L. SPIERS, F.S.A. [A.].

The death of Mr. Walter L. Spiers, F.S.A., will be deeply felt by all students of historical architecture. A student himself of a most retiring and modest character, it was only to a small number that Walter Spiers was adequately known as the possessor of remarkable gifts as an investigator, as an expert of real skill and knowledge. He had in addition the boundless patience of a born indexer, and to his labours in this respect many have been greatly indebted. To the Soane Museum his loss is irreparable, and it is no disrespect to his distinguished predecessors in that office to assert that he was the best Curator that ever held that position of trust. During the last thirteen years he has done more than anyone to realise something of the idea that lay behind the involved and contradictory intentions of the eccentric deviser of the Soane Museum. Thanks to his labours much has been done to render accessible to students the treasures of Classic and English Renaissance architecture that Soane, following the tradition of the eighteenth century collectors, had stored in his

unique house. Walter Spiers' own special studies centred on the work of the Stones, and it is to be hoped that the Walpole Society will achieve the promised publication of his researches, which included a remarkable series of photographs, taken by himself, of all the examples which he had personally hunted out during his too brief holidays. In the department of London topography he was an acknowledged expert, and the late Mr. Henry Wheatley, F.S.A., shortly before his lamented death, warmly expressed to the writer his sense of Walter Spiers' great value as a member of the Committee of that Society. He had a series of Ordnance maps of London which he had laboriously corrected back to show, not only the original streets and buildings, but also the existing old work that remained. These he would most kindly produce to elucidate any point that arose, and he would positively enjoy discussing some intricate problem, of a possible identification of site, as in the case of various unassigned designs by Robert Adam. I received several interesting letters from him on such points, and no one could be more kindly congratulatory when some mysterious case of this character had

been finally proved. His caution was extreme in such matters, and his arguments against would be based on formidable facts—arising from his knowledge of the pre-existing conditions of site and of surrounding buildings. A plausible theory for placing a design by Robert Adam, for the Duke of Richmond, on the site of Richmond Terrace collapsed, I remember, in this way, as his maps proved ancient site conditions, which contradicted levels and approaches, otherwise quite plausible. Although my acquaintance with Walter Spiers extended back to the building of the headquarters of the Artists', in 1888-9, of which he was for many years a most enthusiastic member and officer, it was only during the last four years that I really came to know him well. Spending all the leisure I could afford in afternoons at the Museum, over the Adam drawings, I obtained some insight into his labours, and it was great pleasure to me when I was able to enlist his aid in part of the work which will be published hereafter under his name. He was a great but discriminating admirer of Robert Adam. Trained himself in the Gothic school, his studies had been on different lines to those of his brother. For his old master, T. H. Wyatt, he had a great respect, and he would occasionally refer to his experiences in that office. He held at one time the post of District Surveyor, and had also seen a good deal of practical work in connection with his brother's buildings. I never knew him to refer to any building of his own, and, in fact, a knowledge of his studies could only be arrived at by inference, and I never saw any manuscript or studies of his own, except that he once showed me his collection of Stone photographs. To anyone, however, who called, as a student, any information he had was most freely given, but as he disliked his name being quoted in any way, it was difficult for his services to be adequately acknowledged. His recent election as a Fellow of the Society of Antiquaries was a source of pleasure to him, but unfortunately his early death has prevented his attending on more than, I think, the occasion of his formal reception as a member. The letters received, however, in acknowledgment of the notification of his death, all show a remarkable appreciation of his devotion to duty and of his great knowledge, unique modesty and personal kindness.

ARTHUR T. BOLTON [F.].

THOMAS EDWARD PRYCE [A.].

Our Class of Associates by this time contains but a small and steadily diminishing band of veterans of those far-off days before the compulsory Examination was set up as a qualifying test for candidature. The membership of this band has now been further diminished by the death of T. E. Pryce, which took place on the 27th ult., with tragic suddenness, at Llangadfan, Montgomeryshire. During an evening walk, whilst in the act of filling his pipe at a roadside gate commanding a landscape to which he had just been drawing a

comrade's notice, he fell face downwards, smiled as the other man raised him from the ground, and in a few minutes had passed away. Heart-trouble had called for his being under medical treatment during some months past. He lies in the old churchyard of Llangadfan, just above his favourite fishing stream, the Banw, where, during the last week of his life, he had been enjoying accustomed sport. In the profession, and beyond it, he won the esteem of a wide circle of friends, who had a most warm appreciation of his genial personality. Amongst his professional brethren he was for a time known almost better, perhaps, at the Architectural Association than at the Institute, owing to his serving office there as an Hon. Secretary, and then as a Vice-President, through the years 1885-90. Later on at the Institute he rendered service on the Practice Committee in the years 1904-1909.

Thomas Edward Pryce was born in December, 1854, at Welshpool, Montgomeryshire, where his boyhood was spent until his entering University College School, London. In due time he was articled to Mr. Edward Power, District Surveyor for Walbrook, E.C. After serving his articles he worked as an assistant in the offices of Messrs. Giles and Gough, Mr. J. T. Wimperis and others, and lastly as chief assistant to Mr. Joseph Peacock, of Bloomsbury Square. Meanwhile he had entered the Architectural School of the Royal Academy, where eventually, in 1880 I think, he was awarded the Silver Medal for Measured Drawings, the subject set for that year being Gibbs's Church of St. Mary-le-Strand.

He became an Associate of the Institute in 1881. As an architect he practised first in Argyll Place, W., then in Bedford Row, and lastly in Gray's Inn Square. Amongst his executed works may be mentioned alterations and additions to Ifield Manor, Sussex; the Church House, Welshpool, and Thorney Court, Kensington Road, W., a large group of flats, for the Royal Exchange Assurance. He was also mainly responsible for the ranges of stabling and other out-buildings at Wickham Hall, Kent. Of his designs shown at the Academy Exhibitions that for Barmouth Parish Church was the most important, although not one selected for execution. This received special notice from Mr. J. L. Pearson, R.A. Other exhibits comprised various drawings of old timbered-houses of Montgomeryshire, notably Trewern Hall, Pertheyrin, old Llandinam Hall and Lymore Hall. Pryce's drawings of this last are reproduced as illustrations to an article he wrote on these houses, in the "Montgomeryshire Collections" of the Powysland Club. His Welsh ancestry and his instincts as an architect would combine to influence him in such studies, and as a member of the Cymmrodorion Society he continued in touch with research concerning the land of his fathers. Present-day education for Wales was no less an interest of his, and as a member of the Society of Ancient Britons he took a personal concern in the Welsh School for Girls at Ashford, Middlesex.

From his boyhood upwards he was a fly-fisher; to

follow the beagles and the harriers across country was a youthful recreation in which he delighted; football became his game at school, and so remained for years afterwards; and a further outlet for his energies as a young man was found in the London Rowing Club.

His inborn fondness for his own countryside was a clear and constant flame burning even unto, and brightening, his latest moments. As one who in no slight degree contributed to the happiness of others, may he now be so far accounted happy in that it was granted to him to pass his last few days, and to be buried, in his native Powysland—"Paradwys Cymru."

W. M.

CORRESPONDENCE.

Gothic Construction.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Sir Thomas Jackson's reply to me, in your current issue, calls for a brief rejoinder.

Sir Thomas does not represent me correctly. He says: "Mr. Moore holds to his contention that there is no Gothic short of Amiens. . . . He excludes from the style all that had been done before during the Middle Ages." But in my *Development and Character of Gothic Architecture*, under the heading "Gothic Construction in France," I have, through several chapters, discussed the Gothic evolution in the extant early monuments, and shown that these transitional buildings lead up to, and culminate in, Amiens. I there examine, among others, the very monuments that Sir Thomas tells us—as if I had ignored them—it is necessary to understand. "To say," he continues, "that mediæval architecture suddenly becomes Gothic at Amiens is like saying that a boy suddenly becomes human when he becomes a man." But I have not said anything of the kind.

After these remarks Sir Thomas returns to the question of the "wall-rib," and says: "Mr. Moore objects to my claiming the wall-rib as a part of the wall and not of the vault." I make no such objection where there is a wall, but I have shown that in the developed French Gothic there is no wall beneath the vault, and where there is no wall, it would seem obvious that the rib cannot be bonded into, or belong to, a wall, as Sir Thomas contends. In this paragraph the clerestories of Chartres, Laon and Lisieux are grouped together as if they were alike in character. But Chartres, though unusually robust in construction, is developed Gothic in having no wall beneath the vault; whereas both Laon and Lisieux are transitional buildings, since they retain the clerestory walls. To cite the Norman clerestory of Winchester, within which Wykeham's vaulting was built, in this connection, as Sir Thomas does, is to confuse things of radically different natures.

In the fourth paragraph, Sir Thomas, speaking of the stilted of the longitudinal rib—which he still maintains was done only to give more room for the window—says: "the narrow side arch has to rise at its

crown to the level of the wide transverse arches, and if Mr. Moore will try to strike the wall-rib without the stilt in the earlier clerestories he will find it would cut across the windows, narrow though they be, besides being unsightly from the contrast of its acuteness with the other arches." I think if an unstilted arch were struck in the clerestory of the easternmost bay of the nave of Paris—which is now in the original form—it would be found that it would quite clear the window with something to spare; and if in any early buildings such an arch would at all encroach on the window, it would be by so very little that it is inconceivable that the builders would have taken the trouble to stilt the arch, and provide the shafts with their bases and capitals, merely in order to gain so slight an increase in the size of the opening. It appears to me more reasonable to suppose that if in any case the window was made so large that it would not clear an unstilted arch, it was simply because the stilted, for the structural purpose of concentrating thrust, was found to afford the room. As for the arch without the stilt being unsightly, I wonder that an English writer should think it so; for it is very common in England, as in the choir of Worcester. In most English books, diagrams intended to illustrate Gothic vaulting give an unstilted clerestory arch, as Sir Thomas himself does on pages 36 and 213 of his first volume.

CHARLES H. MOORE [*Hon. A.*]

The R.I.B.A. Informal Conferences.

Sheffield University: 3 June, 1917.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—The reports of the above have provided much remarkably interesting reading, and must have made many beside myself extremely sorry that we have been unable to hear, and possibly take part in, these discussions. Writing after the event is rather cold-blooded work, and present-day activities make one feel somewhat out of touch with educational work, but I feel that there are one or two points I should like to put forward. I have, from time to time, drawn attention to what I have considered weak points in our present methods, and am glad to see that a number of these have now been taken up by more influential members. It is hardly possible, and certainly not desirable, for me to go over the old ground again, but the following very informal notes may be worth consideration at the present time.

(1) I think no drastic changes should be made in our educational system, or want of system, until interested people who are at present engaged in war work of one kind or another are able to take part in the discussions.

(2) While highly appreciating much of Mr. Atkinson's contribution, I was sorry to see his suggestion that only schools with a certain number of students should be *tolerated* (horrid word!). It reminded me of a story of a certain powerful monarch, with possibly a touch of swelled head, who had designs upon the pos-

sessions of a neighbouring king, who, though far less powerful, had a heart of gold. But possibly Mr. Atkinson has heard the story.

(3) We have been far too anxious to copy the results of other educational systems, and have failed to appreciate all that went to produce those results.

(4) We have been too little interested in the foundations at the base of our educational structure. How many have realised that by far the finest move made by the Institute in recent years was the abandonment of the Preliminary Examination? What a fight one or two of us had to achieve that result! What amazing fallacies were produced by the enemies of this reform! And how little is the victory appreciated now it is won! Perhaps, when it is clearly understood, we may be able to work up steadily from that point, and finally get to the "advanced work" about which we talk too much at present. We might, then, discuss the scheme I suggested in *The Builder* (8th March 1912), for making the doing of "advanced work" a qualification for the Fellowship.

(5) This, and the two previous paragraphs, are almost all part of the same idea, for in this I want to draw attention to the fact that we are in much too big a hurry to fly. A great defect in recent efforts has been the attempt to do marvellous things in the first year or so, with the result that the student not only does not understand what he is doing then, but is still more baffled by his later work. Art is long, and life is short, but these desperate sprints—I have said it before (*JOURNAL R.I.B.A.*, 14th June 1913)—are of little help to the competitor in what is really a long-distance race.

(6) Our sense of humour needs developing. Years ago we poked fun at the Greek Revival, which had some point in it; now we poke fun at the Gothic Revival, which also had some point in it; but who is philosopher enough to poke fun at the present fashions, some of which have precious little point in them? First, we have the re-revival of the Greek Revival. Do we shriek with laughter at the miles of egg-and-tongue, &c., in the all too perfect photographs we see from time to time? Or are we obsessed with a feeling of sorrow for the poor devil who has to stick them up? Then there are the dreadful attempts to repeat all the worst features of the work of the Brothers Adam and their followers. Isn't it enough to appreciate this work for its beauties, or even to love it for its human defects? Must we turn worse archæologist than the Gothic Revivalist and reproduce it, defects and all, down to the minutest details? If architects possessed what Kipling would call the "essential guts" of minor poets, I would quote examples; but that is not allowed, we are much too thin-skinned. I once tried, but the censor intervened. Still, by running through the illustrated professional journals for the last year or so, they can easily be found.

(7) This reminds me of the importance of architectural criticism. We must actually welcome and encourage it, so that in time the average educated person

will be as familiar with it as he is at present with literary criticism.

(8) When shall we realise that the main thing is what Lethaby calls "Tidiness," Jackson "Reason," and what I have ventured, with great daring in these days, to call "Efficiency" (*JOURNAL R.I.B.A.*, 31st July 1915)? Can we imagine the criticisms which will be written in, say, a hundred years time of our present work? Will the critic of 2017 praise one of our buildings for the care with which the designer reproduced the bones, or even the spirit, of 1817? Or will he condemn that one, and praise another for being a fine solution of definite requirements of a definite place and time? Perhaps he will even find that there were artists among architects in 1817, 1867, and in 1917; and that, of course, as the gentle reader at once discovered, begs the entire question.

(9) I have always regretted our abandonment of the study of principles, and in pre-war days expressed this regret more forcibly than I should at a time like the present. I know it is harder than casting shadows; even harder than doing gold borders; but if only we followed it up we might realise both the good and the bad qualities in the old and modern work we study: we might find that, after all, there is something in proportion and all the rest of them, that there is an awful lot in "Tidiness," "Reason," or "Efficiency," and that, as I once remarked at the Birmingham A.A., "Precedent is a bad master, but a jolly good servant."

(10) In conclusion, while I think the present examinations are specialised in a way which bears no proper relation to any system of specialisation which ought to obtain in the practice of architecture (*The Builder*, 4th April 1913), I must refer to the idea, usually stated implicitly or explicitly in discussions on Architectural Education, that we should all be moulded to the same pattern. It reminds me of another story of that same powerful monarch. He persuaded all his subjects not only to walk alike, but also to think alike. It seemed to work beautifully until suddenly they all discovered that they had all been thinking incorrectly, and then his real troubles began.

"I firmly believe in training students to understand architecture, rather than to follow cut-and-dried rules. The latter method brings quicker results, but the former is a surer one, and one more likely to lead to ultimate success. I do not desire to replace order by licence, but I do desire to see dogmatic teaching replaced by the inculcation of broad principles" (*A.A. Journal*, April 1914).

W. S. PURCHON [A.].

The Architects' War Committee.

To the Editor, *JOURNAL R.I.B.A.*,—

SIR,—As one who has had some connection with the War Committee and its branches since its formation, may I be allowed to express a word of welcome to Mr. Arthur Keen, elected on the 18th ult., as Hon. Secretary, and to say how very fortunate I consider the Committee in securing the services not only of an

architect so widely known to the profession, but one with such an intimate knowledge of the working of the committees, the difficulties and efforts of which can hardly be appreciated by those who have not taken part in them. Those who, for the past year or more, have been doing useful national work through the introduction of the Selection Committee have to thank Mr. Keen probably more than anyone else for the care he has bestowed in bringing before this committee the special qualifications which have led to their recommendation.

ALAN E. MUNBY [F.].



9 CONDUIT STREET, LONDON, W., 16th June 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-fourth List.

Fallen in the War.

- CLARK, Captain WALTER LLEWELLYN, Royal Flying Corps [A. 1914]. Killed in action.
 GASKELL, Lieut. REGINALD ROBINSON, Royal Flying Corps [Probationer]. Accidentally killed whilst flying for his pilot's certificate. Only son of Mr. Peter Gaskell, of Hull [Licentiate].
 BEVILLE, 2nd Lieut. ALFRED GEOFFREY, Queen's Westminster Rifles [Probationer]. Killed in action, Easter Sunday 1917. Aged twenty.

Wounded and Missing.

- TAYLOR, 2nd Lieut. HERBERT SAMUEL, Oxford and Bucks Light Infantry [A. 1914]. Reported wounded and missing 10th May 1917.

Members' Sons Killed.

- COLLCUTT, Lieut. PHILIP MARTIN BLAKE, East Yorkshire Regiment. Killed in action on 12th May. Younger son of Mr. T. E. Colcutt, *Past President*.
 GOTCH, Captain and Adjutant ROBY MYDDELTON, Sherwood Foresters. Wounded and missing on 1st July 1916, now believed killed. Only son of Mr. J. A. Gotch, F.S.A., *Vice-President*.

Military Honours.

- FETHERSTONHAUGH, Staff Captain H. L., Canadian Corps [A.]. Awarded the Military Cross.

Serving with the Forces.

The following is the Forty-third List of Members, Licentiates, and Students R.I.B.A. serving with the Forces, the total to date being 74 Fellows, 520 Associates, 315 Licentiates, and 295 Students:—

ASSOCIATES.

- Bee, Thomas J.: R.N.A.S.
 Hanson, G.: Inland Water Transport R.E.

LICENTIATE.

- Williamson, John: Royal Garrison Artillery.

STUDENT.

- Rankin, T. G.: R.N.A.S.

Promotions, Appointments, &c.

- Rhind, Brigade Major T. D. [A.], promoted to Lt.-Colonel on the Staff.
 Tasker, Captain W. W., R.E. [A.], promoted to Major.
 Fetherstonhaugh, Lieut. H. L. [A.], promoted to Staff Captain Canadian Corps.
 Sands, Hubert C. [A.], promoted to Lieut. and O.C. Sanitary Section R.A.M.C.
 Sewell, 2nd Lieut. R. V. T. [Licentiate], promoted to Lieut., R.E.
 Ledger, Chief P.O. Godfrey H., R.N.V.R. [A.], promoted to 2nd Lieut., R.F.A.
 Kruekenberg, Private F. L., R.A.M.C. [A.], promoted to 2nd Lieut., R.A.M.C.
 Webster, Lieut. F. Coutts [A.], promoted to Captain.

Discussion at the Annual General Meeting, 7th May.

The PRESIDENT: Before we proceed to the main business of the meeting, which is the consideration of the Report of the Council, I am sure we should all like to send a message of congratulation to Sir Ernest George on his election as a Royal Academician. I would also like to say what great pleasure it gives me personally, and I am sure also to the members of the Institute present, to see Mr. Slater back again. (Applause.) We will now proceed to the consideration of the Annual Report, which is published in the current issue of the JOURNAL. In order to open the discussion, I formally move the adoption of the Report.

Mr. E. GUY DAWBER, *Hon. Secretary*, seconded.

Mr. JOHN SLATER, B.A. Lond. [F.]: I would like to say a few words with reference to the Report of the Council. This year the death-roll includes the names of a number of the men who, years ago, used to take an active part in the work of this Institute, and whose voices were often heard in the old meeting-room upstairs. Perhaps the one whom we regret most and knew the best was Phéné Spiers, whose wide knowledge of the history of architecture made illuminating any remark he might make on any subject of archaeological interest. We must all regret the diminution in the number of candidates for the Examinations, but that, of course, was only what was to be expected in consequence of the war. I am afraid we may wait some years before we get back to our old numbers again. I would like to congratulate the Council on the selection they have made of M. Nénot as the recipient of the Royal Gold Medal. It is an appreciation not only of his personal eminence, but also a graceful tribute to the great nation which is our chief Ally in the Herculean conflict in which we are engaged. I am glad to see some notice of the Building Acts, as I have for many years advocated their consolidation. At the present moment they are a veritable *olla podrida* of legislation: and I look forward to the day when we shall have a comprehensive Building Act, which will not only include what is now scattered among a number of amending Acts, but will also exclude any regulations which are not only

quite useless, but unintelligible. The efforts of the Council to promote economy have had very good results, and we are glad to know that Mr. MacAlister and Mr. Baker, who are serving, have not suffered pecuniary loss from their patriotic action. I cannot but think, however, that there might have been found room in the Report for some slight word of appreciation and thanks to those members of the staff who are left and who have been doing double and treble work. But though economy is very well in itself, it may be carried too far. And this brings me to a point on which I think the Council have been to blame. I think it is deeply to be deplored that the activities of the Institute have been so curtailed as they have been by the discontinuance of the Ordinary Meetings and Papers. Architectural practice touches in so many ways problems connected with the war that I cannot help thinking that if we had had Papers upon them and discussions we should have been able to enlarge upon them and to have brought them home to a large number of people. I have heard that complaints have been made as to the tardy recognition by the Government of the help that architects could give. I am afraid that is, to a certain extent, the Institute's own fault. I do not lose sight of the efforts of the War Committee, or of your own personal exertions, Sir; these have been most generous and ungrudging—all honour to you, Sir, for what you have done. I cannot but think, however, that the Institute is bigger than any of its committees or any of its members; and I have for so many years taken an active part in the affairs of the Institute that I cannot help regretting a tendency to inaction which may have the effect of diminishing its dignity and of narrowing its legitimate sphere of action. In another society with which I am connected, the Society of Arts, we have kept up our meetings and had excellent attendances. And the Institute during this last session has had what are called "Informal Conferences." Why could they not have been made Ordinary Meetings? I do hope that in the next session—war or no war—these Ordinary Meetings will be resumed. It is very easy for people to get out of the way of going anywhere, but it is very difficult to get them in the way again. Now, Sir, I have finished my criticisms, but before I sit down I should like to touch on one personal note. The Board of Architectural Education has referred in far too generous terms to my resignation of the Chairmanship. I can assure the meeting and the Council that it was with very great regret that I resigned. But the Chairmanship of the Board requires much time, a great deal of energy and tact, and a keen grip of all the subjects which come before the Board; and it was only because I feared I might not be able to meet those demands, and I felt that the business would be better in younger and more active hands, that I resigned my Chairmanship. I shall always, however, look back with pleasure to my association with that Board, with which, as the Report says, I have been connected since its institution.

Mr. WM. WOODWARD [F.]: Mr. Northover has reminded me that I commenced my discursive criticisms, if I may call them so, of the Annual Report in the year 1896, just twenty-one years ago. Last year when, in consequence of my indisposition, you were good enough to have my observations read, I expressed the hope that when this year's Report was presented it would be with the world at peace. It has not been so, and I can only now express the same hope: that next year we shall be enjoying again the blessings of peace, with all that it means. May I say how pleased we are to see Mr. Slater with us this afternoon? He was one of the members to whom I intended to refer because of his absence, and I am so much more delighted to see him here. With regard to the losses by death, I feel constrained to mention three names out of the many good men whom we have lost. One is Mr. Greenop. His death is a distinct loss to the Institute, and though I have differed from him in Committee I have always felt and acknowledged that he was actuated by the best intentions with regard to the work he undertook for the Institute;

and he is one of the many members of our body who have devoted considerable time and energy to its affairs. Mr. Phené Spiers, a staunch friend of and indefatigable worker for the Institute for nearly fifty years, has already been referred to by Mr. Slater. Then there is one other name among the departed members which brings us back to the old days, that of John Hebb, and with him goes our recollections of the old Metropolitan Board of Works and all that it meant. It is satisfactory to find that of subscribing members we have fifteen more than we had in 1913, and it is equally satisfactory to know that nine out of the eleven Licentiate candidates who presented themselves for examination to qualify for the Fellowship have passed. With regard to the Final Examinations, thirteen passed out of twenty—about the usual average. Coming to the grants, I am pleased to find a grant of £100 to the Architects' Benevolent Society. May I suggest, what you yourself, Sir, have so often suggested, that there are many architects, not only during the war but previous to the war, who would have been able, had their attention been more strenuously directed to it, to contribute to that excellent fund. With regard to the Royal Gold Medal, I endorse what Mr. Slater said, because if we look at the New Sorbonne of M. Nénot, we shall agree that the Royal Gold Medal has been awarded to the right man. In reference to members who have joined the Forces since the outbreak of war, there is a total of 1,190. The number fallen since the last Annual Report is forty-five, and since the beginning of the war we have lost on the battlefield seventy-six of our brother members. Mr. Slater has alluded to the Secretary and Chief Clerk who have been called up for the Army, and we are told in the Report that consideration has been accorded them and other members of the Staff. I am sure we shall agree that if any extra expenditure is required to compensate those gentlemen for the work they are doing in connection with the war the Royal Institute will be the first to acknowledge it. And in saying this may I express the regret we all feel at their absence, and to hear that Mr. MacAlister is not as well as we would wish. With regard to war appointments for architects, last year I used these words: "Notwithstanding all the efforts of our President, very little assistance to architects has been obtained from the Government, nor, from what I personally think of it, is there likely to be. If the Government had employed architects in the usual way in connection with war buildings I am sure that the nation would have saved many hundreds of thousands of pounds sterling." All I have to add to that is that I should propose to substitute "millions" for "hundreds of thousands." I have had before me a very large amount of information as to the enormous losses that have been sustained, and the immense sums that would have been saved if at the early stages the suggestions made to the Government had been adopted to employ architects who would have been willing at that time to help the Government. I take the opportunity to say that during the past year we have all had reason to know the enormous amount of work that the President has put in for the Institute and for the profession in regard to this matter of employment for architects, and I can only say I hope he will have some consideration for his own health and not overdo the very strenuous exertions he has been put to for the Institute during the last twelve months. Passing to the Revision of the Conditions of Contract Committee, I may mention that I was a member of that Committee. I find they have held thirty-eight meetings, and that inclines me to the belief that they have spent too much time on these Conditions of Contract. It is impossible to settle conditions of contract which will meet every emergency or every event in the course of building operations, and I hope that very shortly we shall have this Report of the Revision of Contract Committee before the Institute. On page 135 there is the Financial Statement, and the loss of income through the remission of subscriptions of members on service in my opinion shows the right feeling. There is

a loss of £1,100 on this account alone. Yet in spite of this loss we have a surplus of over £400. The Bank overdraft in 1913 was £4,846; in 1916 it was £1,900. The JOURNAL in 1913 cost £2,129, and in 1916 only £1,118. General printing in 1913 cost £1,115, and in 1916 £449 only. In the Report of the Art Standing Committee, on page 136, there is a reference to two losses in the third paragraph which we all most deeply regret. With regard to the loss of Alfred Wyatt Papworth, I may mention that his father, the late Mr. Wyatt Papworth, my old governor Mr. Arthur Cates, and myself were accustomed to go to the top of this building, night after night, to pack up the parcels of the Architectural Publications Society's *Dictionary of Architecture*. The Report of the Literature Standing Committee records the receipt of many splendid gifts, and we must be most gratified with them. The Librarian's Report shows a good result, the attendances of readers having numbered 2,219, and I can only say again what I have said for some years, how much the Institute owes to the care, diligence and attention of Mr. Direks. The Report of the Practice Standing Committee leads me to ask one or two questions. There is a paragraph headed "Experts' Services and Architects' Charges in relation thereto." It says the Sub-Committee have made a report and submitted it to the Committee, but not a word of information is vouchsafed as to what the report is about. With regard to the "Professional Conduct Sub-Committee and the Schedule of Charges Sub-Committee," both of them have been continued, and several cases have been referred to the former and disposed of. But no further information about these matters is given to the General Body. With regard to Clerks of Works, a report has been made, but the General Body is told nothing about it. And the same may be said with regard to Professional Advertising. Then there is a paragraph headed "Appointment of Arbitrator"—a rather important matter. It would be a most useful thing if we could find out what the Practice Committee think of the appointment of an Arbitrator. In the paragraph following they do give us some information, and I agree with their opinion. The Conditions of Contract I have already referred to, and I hope we shall soon know something more about that matter. At the end of the Practice Committee's Report, it says, "One communication from a member may be of more general interest than most. It had reference to a case in which a client contended that his architect's charges for work recently done should be based upon what the builder's prices would have been before the war." I should have liked to know what the opinion of the Practice Committee was upon that point. The Report of the Science Standing Committee contains a most amusing paragraph headed "Protection of Iron Drain-pipes." It is not stated what was the matter with the pipes, why they were "practically unaffected," or why the firm should have laid them. It is certainly an extraordinary paragraph. Perhaps later Mr. Searles-Wood will tell us more about it. Reference is made to the Metric System. I think we shall all agree that some day we shall have to adopt that system. In regard to the Report of the Town Planning Committee, there is only one subject to which I would make brief reference, so as not to invite discussion, because I do not know that I am quite entitled to refer to it. One of the most important matters as affecting the community at large, and the architectural profession in particular, is involved in what I am about to tell this meeting. I know nothing whatever about it until on April 20th I saw a long report of a conference which had been held at Oxford by what is called the National Housing and Town Planning Council, and which resulted in a series of proposals relative to national housing and town planning. I should like to ask if there was a member of the Institute attending that conference. He would be justified in attending it, of course, but when he attended it—and it was full of the most momentous subjects—did he attend it with any reference whatever to his presence being connected with the Royal Institute of British Archi-

tects? If there was an architect attending, but not as a member of this Institute, I have nothing further to say, but I would like to ask whether this Royal Institute is aware of this National Housing Council, and whether they have given any *cachet* or endorsement whatever to that body. I could say much about this matter, but I will not say another word, because I do not think discussion is warranted this afternoon; I would not have mentioned it but for the reference to Town Planning. The Report of the Honorary Auditors is a very excellent report. Their estimate, which is called a rough estimate, of what the income and expenditure would be has proved to be remarkably accurate. They refer to the books having been kept most carefully and systematically. I know that from Mr. Tayler and the other members of the Staff the Institute has had the greatest possible assistance. I am glad to see Mr. Tayler here, and I hope that next year we shall see Mr. MacAlister and Mr. Baker back, as well as all the rest of the Staff. With reference to the Financial Statement, at page 144, under the head of Expenditure there is an item "Interest on Mortgage." I never like to see this £4,000 mortgage, but we got it on very good terms, and if we ceased to have it we should be worse off at the Bank. The reporting only comes to £7 2s. 5d.; printing and binding £661; addressing, postage and carriage £403. This last item seems out of proportion to the total cost of printing and binding. When I was Chairman of the Finance and House Committee, Mr. Perks, to his credit, made many suggestions which resulted in a considerable economy in the JOURNAL expenses. It is a question whether that £400 for sending out the JOURNAL could not be reduced. The only item on the Balance Sheet I want to mention—I never profess to be able to understand balance sheets—is "Subscriptions in arrear for 1916 and previously, £1,946 16s. 2d." I do not think we shall be justified under the circumstances in treating as an asset this £1,946. I trust we shall deal most leniently with the members whose subscriptions have been allowed to lapse in consequence of the war. In regard to the members in arrear, which I take to be included in this £1,900—perhaps we shall get some information upon that. That is all I have to say with regard to this Report, and I am much obliged to you for listening to me.

THE PRESIDENT: I think it would be better if the more important of Mr. Woodward's questions were answered before we pass on to other subjects, so that the questions and answers may come together. Perhaps Mr. Searles-Wood could throw light on some of the points raised.

MR. H. D. SEARLES-WOOD [F.]: I am sorry to tell Mr. Woodward that the £1,946 is members' subscriptions in arrear other than those for members on Active Service. For the members on Active Service the figure is £1,100, and this has been remitted. The £1,946 represents subscriptions we have not been able to collect. It is the invariable practice to put them down as assets; but I agree that they are not very liquid. With regard to the Expert Services Report, dealing with the relation of the architect to the specialist, that Report, through the delay of the printer, could not be in the hands of the Council to-day, but it will be posted to every member of the Council to-morrow, and we hope to deal with it at the next Council meeting. With regard to the few points Mr. Woodward mentioned connected with my name, I am not now a member of the Science Standing Committee, but I was in the Chair at the time the matters referred to were initiated. There was the question of the durability of treated pipes. That was much in the air at the time, and Mr. Frank May, of Cubitt's, who was interested in the matter, undertook to lay a new set of drains at his house with these pipes, and arranged that they should be open to our periodical inspection. It was the intention of the Science Committee from time to time to have them examined in order to test the durability of the treatment to which the pipes were subjected. With regard to the Conditions of Contract on which Mr. Woodward shows such keenness, we shall be willing to meet his criti-

cisms when we can get the Report out. As to the cost of distributing the JOURNAL, 90,000 copies were issued during the year; at a penny each for inland postage, this would work out at £375, but a large number go abroad and are charged at a higher rate. The postage bill will be materially reduced this year, as the JOURNAL is now issued monthly instead of fortnightly, and quarterly parts are not being issued.

MR. MAX CLARKE [F.]: In answer to Mr. Woodward's inquiry with regard to the Experts' Advice, the special Sub-Committees and the Clerks of Works, it is unusual in any Society to divulge what the matter is, or what the decisions of the Committees were, until report is made to the Council. As reports have not yet been made to the Council it would be undesirable to let the General Body, or anybody else, know what the Committee thought or recommended. [MR. WOODWARD: I agree.] If Mr. Woodward can contain himself until the Council have dealt with these matters, he will have an opportunity then of dealing with them as he may think best. I regret very much that this sum of £1,900 is arrears. I hoped that it represented both arrears and amounts remitted. I trust that members who owe subscriptions contributing towards that £1,900 will not be expelled, because architecture is not in a flourishing condition at the present time, and I think to that cause may be attributed the fact that the arrears have increased so considerably in three years. Generally, I congratulate the Council on the Report, which seems to me to be most satisfactory.

THE PRESIDENT: I assure Mr. Max Clarke that the members whose subscriptions are in arrear are in no danger of expulsion.

MR. SYDNEY PERKS, F.S.A. [F.]: Mr. Woodward has given us an excellent resumé of the Report, but he has left out what to me is the most important matter in the whole of the year—viz., the subject of Charing Cross Bridge. I do not propose to enter into the merits, one way or the other, of this most difficult and complicated problem. I shall only deal with it as a matter of business as it affects the Institute. Might I remind members present that we received our Charter in 1837, as an institution "for the general advancement of civic architecture and the public improvement and embellishment of towns and cities"? That is our primary work, and when we petitioned in another case we said, and very rightly, "your petitioners, as the only chartered body of Architects in the United Kingdom, accept and claim as part of their responsibility and public duty the function of tendering advice to the Government," and that is our chief function, the tendering of advice to the Government. I think everybody here will admit that the most important work we have to do is work on national matters. And if I might make another reference to the work of the Council, I would say that under our Charter of 1887 the Council have the "entire management and superintendence of all affairs and concerns." Those are very important words. The Annual Report now before us states that the Bill "has passed the stage of second reading and is now being considered by a Committee of the House." I said to a member of the Council: "I think you might have told us that the Institute has withdrawn its petition." His reply was: "No, it has not." I asked other members of the Council, and as far as I can make out the Council have never authorised the withdrawal of this petition. The Council did not know it was withdrawn; and the officials here did not know it was withdrawn. Then I began to wonder how I could convince anybody, but luckily I was able to borrow the Parliamentary Publication, and it reads: "Committee and Private Bills Office. Requisitions to withdraw Petitions. Name of Bill: South Eastern and London and Chatham and Dover Railways. Name of Petition withdrawn: the Royal Institute of British Architects and the London Society." Contradict me, Sir, if I am wrong, because it will make the matter shorter. I say our Council never gave any authority for this Petition to be withdrawn, and

did not in fact know that it was withdrawn. Now, Sir, it was withdrawn, and why it was withdrawn we shall very likely hear, but no reason can possibly satisfy me except a statement that I am quite wrong in saying that the Council gave no authority that this Petition was to be withdrawn. I submit to the Council, with all respect, that this matter was the most important that they had before them in the whole year. It was their duty to "manage and superintend"; the words are very strong, and our Council could not, to my mind, properly get over their obligations to us by shunting that responsibility, or allowing other people, however eminent they might be, to act for them. This course has been followed before, and we have rather a bad name at Westminster, certainly with some Members of Parliament. There was the case of St. Paul's Bridge, a very similar case. We petitioned and claimed to be heard by Counsel. Our Petition with regard to Charing Cross Bridge was as follows: "Your petitioners therefore humbly pray that they may be heard by their Counsel, Agents and Witnesses," and the Petition is signed by you, Sir, Mr. Waterhouse, Mr. Keen and Mr. Guy Dawber, as members of this Institute. After a long debate, the Bill was referred to a Committee of the House of Commons with the view to hearing evidence. In that debate the Institute of British Architects was constantly referred to. And, in my opinion, we ought to have given our views. In the St. Paul's Bridge case we did not do so. I will quote one or two remarks which were made about this Institute failing to give evidence when they had petitioned to advise the Government. Lord Balcarras, who is an Honorary Associate of this Institute, said: "I frankly regret the attitude of the Institute of British Architects. I am not in their confidence; . . . from the knowledge I have of architects I think the hon. member opposite was very wide of the mark when he suggested that they did not place their case before the Committee simply because it would have placed a small expense on their personal pockets. I do not believe that." The Chairman of Ways and Means (Mr. Emmott) said: "Is it fair that the Committee should suffer because architects have failed in doing their duty? The Institute of British Architects did not appear before the Committee, although every chance was given to them to appear. I really think the hon. member for Brigg (Sir William Gelder) was hardly fair to the members of his own profession when he said it was a question of cost. I really do not think so meanly of the architects. If this is a matter of great public interest on which they feel so strongly, surely some of them would come forward and give evidence. . . . The architects had their chance and they did not take it." Mr. Alfred Lyttelton said: ". . . He has actually said that because the Institute of British Architects failed to respond to the invitation of the Committee, London is for all time to be treated as if that evidence was not forthcoming and as if no other person could give it but the Institute of British Architects. Nothing could be more fundamentally wrong than that. The interest of the public is of great interest here. What has the public to do with the failure of the British architects to come before the Committee?" That was an exactly similar instance. Having claimed to do a certain thing, we ought to have gone on with it. Now as to tactics. I do not know, but it seems to me that this was the idea. Last year the Bill was introduced into the House of Lords, and it was referred to a Committee. We petitioned against the Bill, and I am very glad to say Sir Aston Webb gave evidence in support of our Petition. Then the Committee of the House of Lords decided unanimously in favour of the Railway Company, and the Bill went to the House of Commons. Then we started a public agitation; there were many letters in the Press, and Members of Parliament were asked to use their influence to get this Railway Scheme thrown out. The result was that the Scheme was thrown out, and the Railway Company lost their Bill. This year they introduced it in the House

of Commons, and again we petitioned against it, but we have not given evidence, and it has passed the Committee stage and will probably go in due course to the House of Lords. On reading between the lines, I think I see the next move: We are going to start a public agitation and try to get the Bill defeated in the House of Lords. That may be so. Now I am in the happy position of being able to get the very best advice for nothing on Parliamentary matters, and I went to a man who knows all about it. He said: "The Members of one House will never listen to a public body when it has refused to give evidence before a Committee of the other House." We were justified last year in raising an agitation, and the House of Commons listened to us, because Sir Aston Webb had given evidence. But my informant said: "In this case you have very little chance. You had your opportunity to give evidence before the Committee appointed to hear evidence, and you threw up the sponge. The reason why a Petition is withdrawn is either because the petitioners are promised what they want or part of it, or else they see their case is hopeless, and so they withdraw—consequently, I think, strengthening very much the other side." But we did not want anything for ourselves. We acted on public grounds and we should have gone on. I do not think we ought to place ourselves in a position to draw upon us a severe rebuke such as we received in Parliament over St. Paul's Bridge. I think we are entitled to some explanation from the Council as to why they did this. As far as I know, they did not know the Petition was withdrawn; certain members tell me they did not know anything about it. I have all the dates and the matter was not urgent. Because we elected these gentlemen to do our work, I submit we are entitled to some explanation as to why they did not do it. I pass now to the Town Planning Committee's Report dealing with this matter. It says: "It is noteworthy, however, that the suggestion put forward on behalf of the Institute and the London Society, for a great Imperial Bridge carrying road traffic over the Thames at Charing Cross, has met with almost unanimous support from all parties." I saw my friend Mr. Davidge, and said I could not believe my eyes when I read that. I said: "I understand that to mean that the idea is that Charing Cross Bridge should be taken down and railway communication severed to Charing Cross and a big station built on the South of the River. Yet you say it has met with almost unanimous support. Don't you know that forty-six Councils of Kent all voted in support of the Railway Company, and not one single authority passed a resolution against it?" and I also called his attention to a most valuable article by Captain Swinton, in the *Nineteenth Century* of last November. Captain Swinton is strongly in favour of a road bridge, but, he says, we must not sever railway communication with Charing Cross. He says we want to make traffic conditions better, not worse.* Mr. Davidge told me that I was quite wrong; that the Committee did not say in our

Report that we wanted to sever railway communication with Charing Cross. I said I was delighted to hear it. He also said his Committee were considering a scheme—and I am also delighted to hear that, too—to show railway communication to Charing Cross. He said his Committee considered it most important. This Town Planning Committee has been very active over this matter. It has criticised, it has circularised, it has agitated, but the one thing it has not done is to produce a plan; that is so like a Town Planning Committee. It is so easy to criticise, but it is a different thing to create. This Institute never has had a plan; we have never had a scheme of our own, although I understand the idea is at least thirty years old; and yet this is a matter of national importance, which we claim, under our Charter, to advise the Government upon. And I now just want to say one or two words about our President. We all know he has done a tremendous amount of work, especially in advising the Government with regard to the erection of buildings, and it has been a most difficult thing to do. I have come across many architects whose work has been stopped, and they have thought it hard, but not one of them thought he had been badly treated. One man said: "It is a nuisance that the work had to be stopped; I saw our President, and he did everything he possibly could for me." Another man said: "Really, he stretched a point in my favour." I have not heard a man complain of the slightest harsh treatment. (Hear, hear.) The praise has been universal and the work has been most difficult to do. I think the whole of our profession should know how indebted we are for this work which has been done very quietly—you do not see it mentioned in the newspapers every day—it is an enormous amount of unadvertised work and it is work which I know, from men I meet, has given universal satisfaction and there has not been a grumble from anyone.

THE PRESIDENT: Mr. Perks's remarks on Charing Cross Bridge open up a very wide field. I will not attempt to deal with it myself, but will ask Sir Aston Webb to reply.

SIR ASTON WEBB, K.C.V.O., C.B., R.A. [F.]: It certainly is not my place to defend the action of the Council: they are perfectly able to defend themselves, if necessary. The Council saw fit to refer this matter to a Committee, as they refer all such matters to Committees. The London Society did the same: they felt—and I presume the Council of the Institute felt—that this matter must be considered by a few, and that a large Council could not possibly deal with an intricate matter of this sort, which requires decisions quickly and promptly made; this would be impossible if a matter of this sort had to be continuously referred back to Council. It was thought, also, that it would work for efficiency if the Institute and the London Society joined their Committees together: it would save expense and time and ensure rapid execution. That was done. I was made Chairman of the Committee, and I take full responsibility, as Chairman, for what has been done. We did it with the greatest care, and under what we considered the best advice. Mr. Perks seems to have had advice. We have also had advice. Mr. Perks has not paid for his, apparently, while we have paid for ours. Personally, I have no great confidence in gratuitous advice. Last year, when the Company proposed to strengthen the bridge, it was felt by most of us that an effort should be made to arouse public opinion and prevent, if possible, such a thing being done during war time when the matter could not be properly considered. To say, therefore, we ought to have prepared a plan for a new bridge with which the Bill had nothing to do and which could stand the criticism of a Parliamentary Committee is, in my opinion, simply absurd. We did consider the advisability of a plan and were advised against it. We were opposing the strengthening of the bridge, and that only. We believed the London County Council themselves were prepared to submit a scheme for the alteration of that important part of the river, if they were given a reasonable time. They could not do it during the war. That was what we went to Parliament for, to

* I give the following extract from Captain Swinton's article, "Castles in the Air at Charing Cross," in the *Nineteenth Century* for November, 1916: "Now, do not let us forget that, though this railway company is a dividend-earning concern, it is also one of the notable servants of London, and that the whole of London is interested in these her servants, Charing Cross Station, and the bridge without which it would be useless, are very valuable property to some Londoners. We may condemn our forefathers for allowing the bridge to come there, but we must bear in mind that a large section of the public profit enormously by the permission granted. It is not only the Kent and Continental traffic which is brought into the heart of London, but there are tens of thousands of so-called 'daily-breaders' who use it every morning and evening. Their work lies near the terminus: their homes lie along the suburban lines. The Company has virtually contracted to bring in their trains across the river—dry-shod—men and women from a great mass of nearer and further suburbs. Many of these have bought and built houses on the strength of this contract, and we have to consider their interests. When a travelling communication has been long established it is not fair light-heartedly to destroy it. We want to make traffic conditions better, not worse."

ask for time. We engaged a well-known Parliamentary agent and applied to the Institute to know if they would help us with funds. They said they would give us ten guineas, which we were very glad to have: but you cannot go very far with Parliamentary Counsel in a House of Lords Committee on ten guineas. Therefore we had to get help amongst our friends. Lord Plymouth and Lord Beauchamp very kindly got an instruction passed by the House of Lords requesting the Committee (as we had no *locus*) to consider evidence from the Royal Institute of British Architects and the London Society and others interested on the effect of the Bill on the improvement of this very important part of London, both as regards traffic and as regards the railway. That gave us a standing before the Committee, and enabled us to give evidence. Personally, I have always declined to give evidence, but I did so on this occasion and spent many days in the Committee room, and gave as much attention to it as I have ever done to any of my own private work. The Committee were very sympathetic, and the Chairman said that they would all like to get rid of the bridge, but they did not see how they could. So they passed the Preamble, and it went down to the House of Commons, where, thanks very largely to Mr. Burns's energy, it was defeated. The County Council, all the time, were opposing the Bill, and we were merely supporting the County Council. Of course, the Institute cannot put a station on the other side of the river or take a road bridge across it; but the London County Council and Parliament can do it, and we loyally supported them through the whole of last year. When the House of Commons threw the Bill out, the Railway Company said "We shall bring it in again." Then the County Council, as they promised, had one or two conferences, to see whether it was possible to prepare some scheme for this bridge. A conference was held at the Mansion House and another conference at Spring Gardens. Both of these were attended by many representative men, including your representatives, Mr. Blomfield and myself and Mr. Burns, and resolutions were passed in favour of this scheme. The Bill, as was expected, was reintroduced into the House of Commons, and there was a Second Reading debate, at which I was present. There was a very good debate, with constant references to the Institute and to others, and always in favour of some big scheme. But with this reservation: we do not like, at the moment, to stop the strengthening of the bridge—the advisers of the Company say this bridge must be strengthened, and we do not like to take the responsibility of opposing it. Meantime the County Council had taken the same line. They declined to oppose the Bill on the preamble, only on clauses. Therefore we were "left," and had no possibility of doing anything ourselves: our position was to assist the London County Council in opposing the Bill. The Bill was passed by a large majority, aided by the Irish, for some reason. Before that, we had lodged a petition, so as to give us a *locus* if we wished to go before a Committee; and I may say that the matter is not at all dead yet—and unless this meeting insists on my giving all the details, I do not propose to do so. If you do insist I shall give them, and throw up my responsibility in the matter. We had a conference with our Parliamentary agent, and upon the advice of Members of both Houses of Parliament deeply interested in the matter, we decided that our best course was not to appear before that Committee. No Committee of the House of Commons, in their opinion, would think of throwing over a Bill on their own responsibility which had passed a Second Reading with such a large majority. The L.C.C. obtained a clause that the money which is now to be spent on the bridge—£167,000—is to be what they call "sterilised," and, should any scheme come up for altering this bridge within the next fifteen years, the sum for the strengthening and improved value of the bridge will not be included in the compensation to be paid for the present bridge. We are not satisfied with these concessions and still oppose the strengthening of the bridge.

We deliberately came to this conclusion under the advice of our supporters, the people who would have helped us to obtain the funds, and of those Members of Parliament who have acted with us. I was prepared to go to the Committee again, but I think we were perfectly right in accepting the advice we did. When that was settled, I said to our Hon. Secretary: "This is an important matter, we must call the Joint Committee together and inform them." And this we did. I may say with regard to withdrawing the Petition, that that is a technicality. You either appear or you do not. But if you do not intend to appear, you withdraw the Petition. It is only fair play to the other side. Otherwise, if you keep the Petition on, and the Committee meet, the other side say "We have all these witnesses here to meet it, and if the other side do not choose to appear we must ask them to pay for it." And we might have had to come to the Institute and say: "Your ten guineas is swollen to I don't know what." So, when we decided we would not appear, the Petition was withdrawn. I said to our Parliamentary agent: "Is it clear that if we withdraw our Petition we do not withdraw our opposition to the Bill?" He said: "It is quite clear." We declined to come to any little compromise with the Company. We are against the strengthening of this bridge because we think it spoils London. We are against the Bill, and have nothing to say except that. We desire no compromise. The Joint Committee of the R.I.B.A. and London Society came to the same conclusion, that we had better not proceed in Committee against the Bill. It is no good worrying everybody all round if you know you have no chance; neither is it playing the game. I think, now, I have got to that stage when I had better not say another word, unless you ask me.

MR. PERKS: I should like to add a word of personal explanation. I referred in my remarks to the excellent work of Sir Aston Webb; I had nothing but praise for it. My criticism was directed to the Council and the Annual Report. A certain thing happens: we are not told that it has happened; the Council apparently do not know that it has happened. I am asking for an explanation from the Council how it is that the business of the Institute is conducted in this way. It ought to have known what had been done, it is entirely a domestic matter, and, with all respect, I submit that the Council ought to have attended to it.

MR. W. R. DAVISON, Hon. Secretary of the Joint Committee: I should like to explain that the Report to the General Body was drawn up at least a month ago. The matters Mr. Perks referred to have happened since, and the Council have been informed since. I think the technical point raised by Mr. Perks was put very ably, and he deserves credit for it. The Institute's policy throughout, however, has been to uphold the principles which the Institute was founded for, and to see that this great opportunity is not allowed to slip. And so far as this Institute is concerned we are very much indebted to Sir Aston Webb for the great work he is doing, in fair weather and in foul, in seeing that the aims of London are kept constantly before the general public. I feel sure that the Institute as a whole will appreciate what has been done.

THE PRESIDENT: In answer to Mr. Perks's criticism of the Council, I should like to say that when the Council appoints a Committee of this kind it is intended that the Committee should act as they deem expedient. This Joint Committee is formed of strong people, and when certain emergencies arise they must be dealt with there and then. It would be no use their continually coming back and asking the Council if they could do this, that, or the other. If that were done, the opportunities for action would be lost entirely. I think we may say with Mr. Perks that it is much more easy to criticise than it is to act. But the Council have been perfectly satisfied with the work of the Committee, and are full of gratitude to Sir Aston Webb for the able way in which he has conducted the work of that Committee as its Chairman. We cannot always look into things when they are working. Sir Aston has said enough

to show that the plant is not at all dead, but if we want to dig up the roots to see how it is getting on we shall probably kill it. I am sure Mr. Perks has only brought this forward—as he always does—in the best interests of the Institute. I would like to propose a very hearty vote of thanks to Sir Aston Webb on behalf of the Institute for the great ability he has shown in the conduct of this important business, and the amount of time and care he has devoted to it.

The resolution was carried by acclamation.

Mr. DAVIDGE: We might add a rider that we hope Mr. Perks will join the new Council: then he will be able to keep us all in order.

Mr. MAX CLARKE [F.]: Before Mr. Munby left the room he asked me to inform the meeting that the Timber Specification had ceased to exist, having completed its work of drawing up a simple specification for soft timber. Also that the Committee on "Timber" had come to an end, having had meetings with Mr. Duchesne and the Board of Trade. I take it that the Industrial Research Committee will take up the work, because the latter say in their Report: "One of the most important subjects dealt with is that of timber in relation to decay and preservation, use of Colonial woods, and afforestation."

Mr. H. HARDWICKE LANGSTON [F.]: May we have some information about the professional advertising mentioned on page 139? It says there have been complaints on this matter. Then in regard to the appointment of an Arbitrator it says that the form has been approved. I suppose that can be seen at the office of the Secretary?

THE PRESIDENT: Yes; they have copies in the office.

Mr. LANGSTON: With regard to the Conditions of Contract, it would be interesting to know what the position is. It has been before the Institute for several years, and we seem to have done nothing more in the way of revising it than altering, as we did, those three monosyllables "nor shall it" into "so as to" in one of the clauses. It would be of great benefit if the revision could be accelerated and the document brought into general use.

THE PRESIDENT: It is getting late, and I have a few matters to refer to before the meeting closes. In connection with Mr. Slater's lament that the papers and the evening meetings were given up, of course things change very quickly during the war, and in the early days we were in a very unsettled state. There was a strong feeling amongst Members that in such strenuous times, and times which were so strange to us, we had more important things to occupy our minds than papers on abstract subjects of Architecture. Then came the Lighting Order, which made it necessary to hold the meetings in the afternoon; and although people are not very busy they do not seem disposed to come to afternoon meetings. I think it is likely, however, that next Session we shall revert to the old custom and have papers as usual, though the meetings will probably have to be held in the afternoon. Referring again to Mr. Slater, his resignation from the Board of Architectural Education is a very serious loss, and one which it will be very difficult to make up. He has the many qualities that are most essential in the Chairman of that Board. They say nobody is indispensable, but Mr. Slater is very nearly so. I must thank Mr. Perks for the kind remarks he made with regard to my own work, and I must say a word about the Architects' War Committee. You will see from the Report of that Committee that, although it has been rather severely criticised—I never quite knew why—it has done a lot of exceedingly useful work. It cannot of course provide positions for all the people who require them. You will see, however, that in one way and another it has come into contact with something like 900 people. I cannot say offhand what it has done for them, but it has done a great deal, and it has enabled a large number of people to find useful work for themselves. Many have been placed in positions where their training and abilities have been a profit to themselves and of advantage to their country. There has also been a disposition to

criticise the Institute because the Government has not asked the Institute as a body to come and help them. I do not think the Institute should be criticised for that. We should criticise the Government, and I hope, if we have an opportunity, we shall criticise the Government pretty severely. But don't blame us. We have done everything that can possibly be done: nothing has been neglected. A point which is sometimes overlooked is that we have something to offer to the Government, something of value, and we must offer this with dignity. We cannot be making ourselves a nuisance to the Government, so that they adopt the attitude of giving us a penny to go away. After having offered our services in a dignified way, and been courteously refused, it is difficult to know what is the next step. However, I think we may say that, whatever may have been the case before the war, there will be no Government Department, either old or new, which has not now heard of the Royal Institute of British Architects. Referring again to the War Committee, I want to take a special opportunity of mentioning the services of Mr. Munby, Colonel Leslie, Mr. Walter Tapper, and Mr. Arthur Keen. These gentlemen, and especially Mr. Munby—I think I must mark him out for special commendation, because he has worked most energetically—these gentlemen have given very generously of their time and labour to the work of the Committee, and I think the Institute, and the profession generally, are greatly indebted to them. I beg to move that a very cordial vote of thanks be passed to these gentlemen for their work. [Carried by acclamation.] Then I have a word to say about the Staff. I think members who have had close connection with the work of the Institute lately can tell you that the amount of labour thrown on the members of the Staff—Mr. Tayler, Mr. Dircks and Mr. Northover—is enormous. They are doing between them not only their own work but the work of Mr. MacAlister, who does a great deal when he is here, and Mr. Baker, the Chief Clerk. I move that we pass a hearty vote of thanks to the staff for the able and loyal way in which they have come to the rescue of the Institute.

The vote having been carried by acclamation, the remainder of the business proceeded as recorded in the Minutes published in the last issue.

The Annual Elections: Scrutineers' Reports.

The results of the Annual Elections are recorded in the subjoined Reports of the Scrutineers, which were read at the General Meeting last Monday.

The Scrutineers appointed to count the votes for the election of the Council and Standing Committees for the Session 1917-18 beg to report as follows:—563 envelopes were received—275 from Fellows, 284 from Associates, and 4 from Hon. Associates. Three were rejected as they contained letters. The result of the election is as follows:—

PRESIDENT (unopposed).—Henry Thomas Hare.

PAST-PRESIDENTS (unopposed).—Thomas Edward Colcutt, Ernest Newton.

VICE-PRESIDENTS (unopposed).—Sir John James Burnet, Walter Cave, John Alfred Gotch, Paul Waterhouse.

HON. SECRETARY (unopposed).—Edward Guy Dawber.

REPRESENTATIVES OF ALLIED SOCIETIES (all unopposed).—Robert Burns Dick, Newcastle; John Bradshaw Gaas, Manchester; Edward Percy Hinde, Liverpool; William Kaye-Parry, Dublin; Adam Francis Watson, Sheffield; John Watson, Glasgow; Sir Frank W. Wills, Bristol.

REPRESENTATIVE OF THE ARCHITECTURAL ASSOCIATION (unopposed).—Henry Martineau Fletcher.

HON. AUDITORS (unopposed).—Henry Albert Saul [F.], Hubert Springford East [A.].

MEMBERS OF COUNCIL.

We beg to report that 556 voting papers were received and examined. There were three voting papers entirely rejected. Twenty-six were rejected in regard to the

election of Fellows on the Council; nine papers were rejected in regard to the Associates elected on the Council. Subjoined is the result of the Election:

Elected: H. V. Lanchester, 395 votes; Robert Atkinson, 352; W. R. Lethaby, 346; G. C. Horsley, 345; A. N. Prentice, 338; John W. Simpson, 334; T. E. Cooper, 305; S. D. Adshad, 304; Geo. Hubbard, 303; H. D. Searles-Wood, 290; A. Keen, 286; F. M. Simpson, 273; A. G. R. Mackenzie, 267; J. J. Joass, 262; G. Gilbert Scott, 253; H. P. Burke Downing, 251; D. B. Niven, 249; P. S. Worthington, 239.

Not Elected: Max Clarke, 218 votes; W. Tapper, 216; Sydney Perks, 215; A. N. Paterson, 199; A. Munby, 196; A. R. Jemmett, 187; Raymond Unwin, 179; F. W. Troup, 176; Matt Garbutt, 166; H. Redfern, 166; W. Gilbee Scott, 162; W. H. White, 144; Alfred Cox, 137; H. V. Ashley, 128; W. E. V. Crompton, 127; W. Campbell Jones, 125; Fred Rowntree, 99; E. R. E. Sutton, 81.

ASSOCIATE-MEMBERS OF COUNCIL.

Elected: L. P. Abercrombie, 358 votes; W. R. Davidge, 331; Leslie Wilkinson, 317; Leonard Rome Guthrie, 286; H. W. Cubitt, 256; H. Shepherd, 240.

Not Elected: S. C. Ramsey, 222 votes; H. A. Welch, 217; P. M. Fraser, 201; A. W. Hennings, 201; Basil Oliver, 192.

(Signed) MAURICE B. ADAMS,
LOUIS AMBLER,
FRANCIS HOOPER,
ROBERT E. CROSSLAND,
R. STEPHEN AYLING,
HENRY JAMES WISE,
HAROLD R. LUCK,
R. W. COLLIER,
CHARLES SPOONER,
H. HARDWICKE LANGSTON,
C. H. BRODIE, *Chairman*,

Scrutineers.

ART STANDING COMMITTEE.

FELLOWS.—Elected: Ernest Newton, 440 votes; Sir J. Burnet, 411; E. G. Dawber, 388; J. A. Gotch, 376; Robt. Atkinson, 369; Sir Aston Webb, 362; Halsey Ricardo, 345; G. G. Scott, 326; A. Keen, 291; W. A. Forsyth, 279.

Not Elected: W. Tapper, 249 votes; H. Redfern, 177; A. Cox, 158; M. Garbutt, 154; H. V. Ashley, 148; H. Sirr, 119.

ASSOCIATES.—Elected: S. K. Greenalade, 430 votes; J. B. Fulton, 422; H. S. East, 393; J. E. Newberry, 354; W. A. Webb, 327; C. E. Sayer, 280.

Not Elected: E. A. Hellicar, 247 votes.

513 voting papers received, of which 17 were invalid.

(Signed) GEO. J. THRIFT REAVELL,
EDGAR H. WOODCOCK,
ERNEST G. ALLEN,
HAROLD BAILEY,
C. H. BRODIE, *Chairman*

Scrutineers.

LITERATURE STANDING COMMITTEE.

FELLOWS.—Elected: P. Waterhouse, 445 votes; H. H. Statham, 417; A. T. Bolton, 415; H. Townsend, 409; A. E. Richardson, 406; D. J. Blow, 379; A. Stratton, 378; H. H. Wigglesworth, 375; L. Ambler, 368; T. Fyfe, 325.

Not Elected: P. Tree, 278 votes; H. G. Ibberson, 258.

ASSOCIATES (unopposed)—L. P. Abercrombie, W. J. Davies, F. R. Hiorns, S. C. Ramsey, L. Wilkinson, W. L. Spiers (deceased since issue of voting papers).

407 papers were received, of which 8 were invalid.

(Signed) HORACE FARQUHARSON,
R. H. MEW,
A. W. SHEPPARD,
C. H. BRODIE, *Chairman*,

Scrutineers.

PRACTICE STANDING COMMITTEE

FELLOWS.—Elected: Max Clarke, 351 votes; George Hubbard, 349; Alfred Saxon Snell, 349; William Henry Atkin-Berry, 331; Alexander Geo. Mackenzie, 329; David Barclay Niven, 310; H. P. Burke Downing, 308; Alan E. Munby, 288; Francis Wm. Troup, 273; William Gilbee Scott, 271.

Not Elected: Herbert Arnold Satchell, 256 votes; William Henry White, 246; William George Hunt, 228; Henry Albert Saul, 181; John Robert Moore-Smith, 143; Frederick William Marks, 125.

ASSOCIATES.—Elected: A. N. Wilson, 363 votes; H. V. M. Emerson, 292; J. D. Scott, 273; P. M. Fraser, 251; C. E. Hutchinson, 241; J. H. Markham, 222.

Not Elected: Clarke Ashworth, 210 votes; C. W. Reeves, 178; W. C. Le Maitre, 166; E. T. A. Wigram, 129; W. Kaula, 78.

515 papers were received, of which there were invalid 31.

(Signed) A. W. SHEPPARD,
FREDK. R. HIORNS,
H. FAVARGER,
J. CRADDOCK PERKIN,
E. HARDING PAYNE,
F. J. FORSTER,
C. H. BRODIE, *Chairman*,

Scrutineers.

SCIENCE STANDING COMMITTEE.

FELLOWS.—Elected: H. D. Searles-Wood, 396 votes; H. P. Adams, 363; A. Conder, 355; W. E. V. Crompton, 351; G. Hornblower, 343; S. Perks, 327; A. O. Collard, 299; R. S. Ayling, 297; H. Cheston, 290; O. C. Hills, 239.

Not Elected: B. J. Dicksee, 193 votes.

ASSOCIATES.—Elected: E. S. Hall, 304 votes; W. R. Davidge, 287; R. J. Angel, 235; D. L. Solomon, 219; E. A. Young, 210; H. Shepherd, 208.

Not Elected: C. A. Daubney, 184 votes; H. W. Burrows, 175; J. E. Franck, 95; W. Jacques, 90.

Received 486 papers, of which 20 were invalid.

(Signed) D. CHRISTOPHER MAYNARD,
C. L. MORGAN,
S. B. K. CAULFIELD,
FRANCIS J. POTTER,
C. H. BRODIE, *Chairman*

Scrutineers.

The President-elect.

After the outbreak of war Mr. Henry T. Hare, the President-elect, filled for some time the position of Hon. Secretary of the Executive and General Purposes Committee of the Architects' War Committee, resigning to take up a commission in the Army Service Corps. He was sent out to France on special service, and returning in January last has since been at the Ministry of Munitions, and is now acting as Technical Adviser to the Building Works Section.

War Department Lands and Buildings.

The Council direct the insertion in the JOURNAL of the following letter addressed to the Secretary from the Lands and Buildings Reconstruction Committee, War Office:—

SIR,—The Lands and Buildings Reconstruction Committee appointed by the Army Council is now engaged upon the preparation of a complete schedule and valuation of all lands and buildings in the occupation of the War Department.

The Committee is also collecting information for the purpose of making recommendations as to the disposal of

those lands and buildings which will no longer be required for military purposes, and of advising upon the expediency in certain cases of purchasing rather than reinstating properties.

For this purpose it is desirable that the information in the hands of the Committee shall be as complete as possible and that the requirements and interests of other Government Departments, as well as those of public bodies, may be fully considered by the Committee before they make recommendations.

A Committee has also been appointed by the Ministry of Munitions for a somewhat similar purpose.

In due course complete plans and particulars of all lands and buildings in the occupation of both the War Department and the Ministry of Munitions will have been prepared and scheduled at the Record Office of the Committees here, and I shall be pleased to afford every information that your Society may require.

If in the meantime Members of your Society are aware that any properties of either of these Departments are likely to be required for any particular purpose upon the conclusion of peace, I shall be glad if you will kindly let me know.

A note of the constitution of both Committees is enclosed herewith for your information.—Yours faithfully,

F. TUDSBURY (MAJOR), *Secretary*.

MINISTRY OF MUNITIONS: SPECIAL COMMITTEE FOR LANDS AND BUILDINGS.—Sir Howard Frank, F.S.I., *Chairman*; Mr. A. Virgoe Buckland, F.S.I.; Lt.-Col. H. C. Cole, F.S.I.; Lt.-Col. A. St. John Cooke, D.S.O.; Major the Hon. L. H. Cripps; Mr. Maurice Graham; Major F. C. T. Tudsbury, *Secretary*; 4, Whitehall Court, S.W.1. Tel. No. Gerrard 6920; Extension 239.

WAR OFFICE: LANDS AND BUILDINGS RECONSTRUCTION COMMITTEE.—Sir Howard Frank, F.S.I., *Chairman*; Brig.-General N. M. Lake, C.B.; Lt.-Col. J. D. Buller, D.S.O.; Col. J. H. Cowan, C.B.; Lt.-Col. A. St. John Cooke, D.S.O.; Lt.-Col. H. C. Cole, F.S.I.; Major N. O. Walker; Mr. A. B. Longe; Major F. C. T. Tudsbury, *Secretary*; 4, Whitehall Court, S.W.1. Tel. No. Gerrard 6920; Extension 239.

Charing Cross Bridge.

The second reading of the Charing Cross Bridge Bill was carried in the House of Lords on the 14th inst. by 53 votes to 19. The Bill is to be referred to a Private Bill Committee, when all objections to it will be heard and considered.

A joint petition against the Bill had been presented by the R.I.B.A. and the London Society in practically the same terms as the petition presented to the Commons a few weeks ago, with the following addition to the penultimate clause: "If your Right Honourable House should deem it expedient to pass the Bill your petitioners respectfully submit that it should only be on condition that none of the works proposed to be authorised by the Bill should be commenced for two years after the conclusion of peace at the termination of the present war."

The Earl of Plymouth, in moving the rejection of the Bill, appealed to the railway company to hold their hand till two years after the war to enable those who were deeply interested in the subject to arrive at some scheme which would be advantageous to the whole of London and would remove a great eyesore.

The Marquess of Crewe said that the opposition of the London County Council had been met, and as chairman of that body he had no further opinion to express on the matter. But speaking as a private individual he wished to say that for many years past he had held that the transfer of Charing Cross Station to the south side of the river and the building of a great road bridge there would be by

far the most important and valuable improvement in London that could be devised or carried into effect.

Lord Harris said the question of the convenience of the public was ignored by the opponents of the measure. The inhabitants of Kent were unanimous in its favour, and would feel a good deal hurt if the second reading were rejected simply on aesthetic grounds.

Earl Curzon said this was not a question to be decided by the voice of Kent only or by those who travelled to London daily. The matter should be considered from the point of view of all the inhabitants of the metropolis. It was the aspiration of everyone to see the station and the bridge disappear. He looked forward to the day when there would be a noble and spacious structure spanning the river at that part of London. But if they persisted in the policy of shoring up and bolstering up the present bridge they would have an enormity that was not to be seen in any other capital in Europe. Were the vast improvements made in that part of London to be defied by the continued existence of that monstrous bridge? They were all looking forward to the time when Charing Cross Station would be removed to the other side of the river, and when a great new bridge, broad and spacious, should be made on which the workers of London would go to and fro to their tasks.

Lord Courtney suggested that an instruction should be given to the Committee that they should sanction nothing which would prevent the carrying out as early as possible of a scheme for removing the station in its entirety to the other side of the river.

The Institute of Scottish Architects.

Formal intimation of the establishment of the above Institute was conveyed to the Council of the Royal Institute in a letter from the Secretary of the Scottish Institute dated 31st March last. The letter stated that "for some years past it has been considered advisable to amalgamate in some way the various Architectural Societies in Scotland, and this has now been accomplished by the voluntary co-operation of the Societies interested, and the central body has been established on a sound financial basis. All the existing Scottish Societies are included in the new body, and will be represented on the Council of the Institute, the headquarters of which will be in Edinburgh; and it is intended that this Council shall in future deal with all matters relating to the profession generally throughout Scotland. It is anticipated that the existence of such a central body affiliated with the Royal Institute will greatly facilitate the negotiations between that Institute and the representatives of the profession in Scotland, and insure obtaining more readily the concentrated opinion of Scottish members upon matters affecting the profession generally."

The report of the Interim Council, which was submitted at the First Annual Convention held in Edinburgh on the 8th June, states:—

"During the Autumn of 1916 some informal Meetings of representatives from the four Scottish Architectural Societies were held in Edinburgh at the invitation of Sir R. Rowand Anderson. At these Meetings there was discussed the proposal to establish a National Institute with suitable endowment, and the lines upon which the Institute should be formed. The proposal met with the hearty approval not only of the representatives but of the various Societies when the subject was afterwards put before them, and it was resolved to appoint members representing the Societies on a more official footing.

"Representatives were accordingly appointed in November, 1916, from the following Societies:—

"Aberdeen Society of Architects: Messrs. Harbourns Maclellan and William Kelly.

"Dundee Institute of Architects: Messrs. James Findlay and George P. K. Young.

"Edinburgh Architectural Association: Sir R. Rowand Anderson and Messrs. T. F. MacLennan and A. Lorne Campbell.

"Glasgow Institute of Architects: Messrs. John Watson, Alex. N. Paterson, and W. B. Whitie.

"These ten gentlemen have since constituted the Interim Council, the Chairman of which has been Sir R. Rowand Anderson, and the Vice-Chairman Mr. John Watson; Mr. W. G. Walker, C.A., has been appointed Secretary and Treasurer.

"The work carried out by the Interim Council has been almost entirely confined to that of organisation. . . .

"In due course intimation was sent to the Royal Institute of British Architects of the establishment of the Institute of Scottish Architects, and a very appreciative letter was received from their Council, expressing their good wishes on the formation of such an Institute, and stating their conviction that this central Body would be very beneficial to the profession throughout Scotland. It is anticipated that affiliation of this Institute with the R.I.B.A. will in the near future take the place of the affiliation of the various Societies presently existing, and it is hoped that to these may be added before long a fifth Chapter with its centre in Inverness."

The report concludes:

"Now that the Scottish Institute is fully established, it is the desire of all concerned that the Membership may be a truly representative one, and that all members of the profession throughout the country with the necessary qualifications, either as principals or as assistants, will apply for membership at the earliest possible date."

The Council for the ensuing year is constituted as follows:—

PRESIDENT: Sir John J. Burnet [F.].—PAST-PRESIDENT: Sir R. Rowand Anderson [F.].—VICE-PRESIDENTS: Aberdeen, Harbourn MacLennan; Dundee, James Findlay; Edinburgh, T. F. MacLennan [A.]; Glasgow, John Watson [F.].—CHAPTER REPRESENTATIVES: Aberdeen, William Kelly; Dundee, George P. K. Young [F.] and James P. Bruce; Edinburgh, A. Lorne Campbell [F.], Thomas Ross, LL.D., and John Wilson [F.]; Glasgow, James Lochhead [F.], Alexander N. Paterson [F.], T. L. Watson [F.], William B. Whitie [F.], and Col. J. B. Wilson [F.].—INSTITUTE REPRESENTATIVES: James K. Hunter [F.], Thomas P. Marwick [A.], and Dr. Alexander Ross [F.].

In honour of the First Annual Convention of the Scottish Institute a reception was held in the Hall of the Royal Scottish Society of Arts in Edinburgh. A number of distinguished guests were entertained, the honours of the occasion being done by Sir R. Rowand Anderson and Lady Anderson. It is regretted that it was found impossible at rather short notice to comply with the invitation to send a representative of the R.I.B.A. to the function, but a congratulatory telegram was sent by the President, Mr. Ernest Newton, A.R.A., which was read at the gathering and warmly received.

Speaking at the reception Sir J. H. A. Macdonald said it was very much to be lamented that in the past they had not tried to make more use of Scottish forms in architecture. He mentioned the Municipal Buildings in Glasgow, which he considered occupied a position made for Scottish architecture. In that case, he contended, there had been no need to go to Italy for a design. Discussing architecture in Scotland from the point of view of "incongruity and disfigurement," Sir John Macdonald said in his travels over the world he had seen some extraordinary work done by people who called themselves architects. He mentioned buildings in Stettin, with false pillars and plaster brackets, purporting to support balconies, with the broad end of the bracket at the outside and the narrow end inside. Such a blunder would be inexcusable in a Scottish architect. Archi-

tecs, he urged, should take care that they had a distinct say in the decoration of any building. It was an incongruity to put up a good building in the wrong place. In this connection he mentioned the erection of "a sort of North Berwick villa," three storeys high, on a wind-swept site in Orkney. On the other hand, he had seen a perfectly plain building in the south, in which all dust-catching ornamentation had been eliminated. The doors consisted simply of three plain pieces of oak, left in the rough. There were wooden beams run across the ceilings. Everything was of the simplest. Visitors were delighted with the effect. He advised architects not to allow their originality to be absolutely crushed by teachers. The painter always insisted that his own hand must go into his work. He noted with satisfaction that the disfiguring railings at the monument on Calton Hill were to be removed. Architects should not allow their beautiful work to be surrounded by railings in that way.

A subsequent speaker, Mr. John Watson [F.], of Glasgow, one of the Vice-Presidents, explained that the objects of the Institute were "to organise and unite in fellowship the architects of Scotland, and to combine their efforts for the general advancement of architecture and for the promotion of the aesthetic, scientific, and practical efficiency of the profession." They desired through the Institute to guide public opinion towards a true appreciation of their aims, and to foster the national architecture of Scotland. Some day, perhaps, a more liberal education in the Universities would arouse interest in the art of architecture. Then they would have from the public a desire for a larger and nobler expression of their art in the cities. The chief desire of the Institute was to help and stimulate such a desire on the part of the public.

Town-Planning Notes.

BIRMINGHAM.—At a meeting of the Town-Planning Committee of the Birmingham City Council, held recently, a deputation was received from the Birmingham Architectural Association, for the purpose of laying before them proposals showing how the local architects could assist in the formulation of town-planning schemes. The deputation was introduced by Mr. W. A. Harvey [Licentiate] (President of the Association); and others who gave their views were Mr. W. H. Bidlake [A.], Mr. Joseph Crouch [F.], and Mr. H. T. Buckland [F.]. It was pointed out that on the Continent and in America architects were always consulted by the local authorities when town-planning schemes and city developments were under consideration, and that there were three kinds of work in regard to which the profession could render assistance—viz., town planning in the suburbs, reconstruction in the centre of the city, and housing. At present architects were only able to come in and criticise a scheme when most of the work had been done. They asked that, if possible, the members of the profession should be consulted at an earlier stage, and said they would give any help they possibly could. No reply was made on behalf of the committee, but it was understood that the suggestions would be carefully considered and reported on later.

REIGATE.—The Reigate and Redhill Voluntary Town-Planning Committee, consisting of architects and surveyors resident and practising in the Borough, have employed their leisure time since war was declared in surveying the district, and as a result have produced a valuable report urging the Borough Council to formulate a comprehensive town-planning scheme. Accompanying the report is a map illustrating the committee's recommendations as regards new roads. The committee are of opinion that a glut of labour may be anticipated upon demobilisation of the Armies, and that their scheme would provide useful and profitable employment of this surplus labour, would prevent distress and discontent, and that the Corporation should be ready to meet this probable emergency by this means.

CLAYTON.—The *Bradford Telegraph* reports that twenty-six applications have been received from architects and surveyors for carrying out the proposed town-planning scheme for Clayton. These have been reduced to four, and after interviewing the selected candidates, the Committee recommended the appointment of Mr. W. Carby Hall [F.], of Prudential Buildings, Leeds. The recommendation has been approved by the District Council.

MINUTES.

At a General Meeting (Business) held Monday, 11th June 1917, at 5.30 p.m.—Present: Mr. Ernest Newton, A.R.A., President, in the chair; 21 Fellows (including 10 members of the Council) and 9 Associates (including 2 members of the Council)—the Minutes of the Annual General Meeting held 7th May 1917, having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced that since the last meeting news had been received that the following members had fallen in action:—2nd Lieut. Herbert Samuel Taylor, Oxford and Bucks Light Infantry, Associate, 1914; Captain Walter Llewellyn Clark, Royal Flying Corps, Associate, 1914; 2nd Lieut. Alfred Geoffrey Beville, Queen's Westminster Rifles, Probationer. On the motion of the Hon. Secretary it was resolved that an expression of the Institute's deepest regret at the loss of these members be recorded on the Minutes and that a message of sympathy and condolence be sent to their nearest relatives.

A vote of condolence was also passed to Mr. Thos. E. Colcutt, Past President, who had lost in the War his younger son, Lieut. Philip Martin Blake Colcutt, East Yorks Regiment, and to Mr. J. A. Gotch, F.S.A., Vice-President, who had lost his only son, Captain Roby Myddleton Gotch, Sherwood Foresters.

Further, the death was announced of Thomas Frederick Pennington, Associate, 1884; Thomas Edward Pryce, Associate, 1881; James McGlashen Ross, Licentiate, and R. Yates Mayor, Licentiate. Also of Walter Lewis Spiers, Associate, 1874, for many years Curator of the Soane Museum and member of the Literature Standing Committee, and of William Henman, of Birmingham, Institute Silver Medallist (Drawings) 1868, Pugin Student 1871, Associate 1882, Fellow 1895 (resigned 1913), Past President of the Birmingham Architectural Association and sometime Member of the Institute Council. On the motion of the Hon. Secretary it was RESOLVED, that the regrets of the Institute at the demise of Mr. Spiers and Mr. Henman be entered on the Minutes and that a vote of condolence be passed to their nearest relatives.

The President, before breaking the seals of the envelopes containing the reports of the Scrutineers appointed to direct the election of the Officers, Council and Standing Committees for the year of office 1917-18, announced that Mr. Greenslade, whose nomination had been passed in error for two Committees, viz., the Art and the Science*—had elected to stand for the former, and should he be found to have been elected to the Science Committee his election would be void and his place be taken by the first member on the unsuccessful list.

The seals having been broken, the Assistant Secretary read the Scrutineers' Reports and the President declared the candidates duly elected to the respective offices in accordance with the Scrutineers' findings.

On the motion of the President, seconded by the Hon. Secretary, a vote of thanks was passed by acclamation to the Scrutineers for their arduous labours under the able direction of Mr. C. H. Brodie [F.] in counting the votes and reporting the results of the elections.

* Under By-law 51 no member is eligible for election on more than one Standing Committee.

Mr. Brodie, in responding, mentioned the need that existed for a regular system in conducting the Scrutiny, especially in view of the fact that the duty might fall to entirely inexperienced hands, and having stated that he had drawn up and would hand to the Secretary after the Meeting a set of Regulations for the conduct of the Scrutiny based on his many years' experience of the work, the President expressed his appreciation and thanks for the service Mr. Brodie had rendered the Institute.

The following candidates were elected to membership in the various classes by show of hands under By-law 9:—

AS FELLOWS (5).

BENWELL: JOHN WAYLAND [A.], Carlisle.

FRASER: PERCIVAL MAURICE [A.].

HEALEY: ALFRED JOHN [A.].

HEATHCOTE: ERNEST GREGG [Licentiate; passed the Examination qualifying for candidature as Fellow].

SPAIN: Colonel ALFRED, V.D., Sydney, N.S.W.

AS ASSOCIATES (4).

HAMILTON: ANDREW BLAYNEY, Wellington, N.Z.

KEELEY: CECIL JOHN HARVEY, Melbourne.

RIDLEY: Captain BASIL WHITE, East Grinstead.

WIGHTMAN: THOMAS BLAIR MONCRIEFF, Brisbane, Australia.

AS HONORARY ASSOCIATE.

PENNEIL: JOSEPH.

Mr. Francis Hooper [F.] having suggested that application should be made to the authorities to allow appeals of architects in connection with military service to be adjudicated upon by a tribunal of architects, whose seat should be the premises of the Royal Institute, the President stated that before any action was taken in the matter he would cause enquiries to be made as to the constitution of the tribunal at present dealing with the appeals in question.

The proceedings closed and the meeting terminated at 6 p.m.

THE EXAMINATIONS.

The Final: Alternative Problems in Design.

Instructions to Candidates.

1. The drawings, which should preferably be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, AND HIS FULL NAME AND ADDRESS, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the Student that the design is his own work and that the drawings have been wholly executed by him. In the preparation of the design the Student may profit by advice.

4. Drawings for subjects (a) are to have the shadows projected at an angle of 45° in line, monochrome, or colour. Drawings in subjects (b) are to be finished as working drawings. Lettering on all drawings must be of a clear, scholarly, and unaffected character.

Subject XXXIV.

(a) or (b) A BILLIARD-ROOM, 30 feet long by 20 feet wide, with fireplace at one end and large bay window at one side.

Drawings.—Plan and two sections to $\frac{1}{4}$ -inch scale, and details full size; one section to show scheme of colour.

(a) or (b) A LINENDRAPER'S SHOP AND SHOWROOMS over four storeys above pavement, having a frontage to 60 feet to a main thoroughfare and a depth of 60 feet. It has a return frontage to side street.

Drawings.—Front elevation, section, and two plans to $\frac{1}{2}$ -inch scale; detail of entrance or principal staircase to $\frac{1}{8}$ -inch scale.

Subject XXXV.

(a) or (b) A PERMANENT HOSTEL FOR 25 WOMEN WELFARE WORKERS.

Site.—The site is practically level, has a frontage of 200 feet and a depth of 400 feet, and is on the south side of a main road running due east and west in a pleasant suburb of an English manufacturing city. The building line is 20 feet back from the road.

Accommodation, etc.—The welfare workers are women who have had a University education, and are engaged in a factory working on the three-shift system, but with no Sunday work. Bedrooms, dining-room, drawing-room, and writing-room are to be provided for the welfare workers, sitting-room and bedroom for the Matron, bedrooms and servants' hall for the kitchen staff, together with the necessary bathrooms, kitchen, scullery, larders, etc.

Materials.—The materials easily available are red bricks and a hard sandstone, which can only be obtained in thin beds.

Drawings.—Block plan, 16 feet to 1 inch, showing general arrangement of building, garden, etc. Plans of each floor, two elevations, and a section to a scale of 8 feet to 1 inch. Half-inch detail of part of entrance front, with one or two full-size details of masonry.

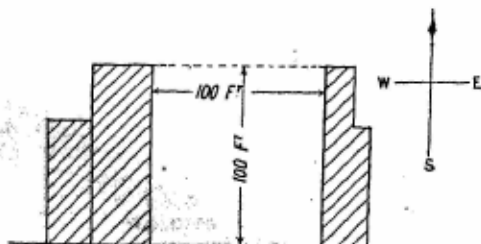
Subject XXXV.

(a) or (b) ALMSHOUSES for the poor on a site 100 feet by 100 feet, facing the street in a country town, with buildings on each side of the frontage as sketch.

There must be no windows to the east and west.

There must be accommodation for fourteen inhabitants, consisting of sitting-room, with cooking stove, scullery, coals, w.c., and one bedroom, and somewhere in the general plan a common reading-room and quarters for a single caretaker. The buildings generally to be two storeys in height.

Drawings.—One-eighth inch scale plans, sections and elevations—2 sheets; $\frac{1}{4}$ -inch scale details—1 sheet.



STREET

Subject XXXVI.

(a) or (b) An ENTRANCE LODGE to a cemetery. Accommodation required, two living rooms, three bedrooms, and office for superintendent.

Drawings.—Two plans, a section and two elevations all to $\frac{1}{2}$ -inch scale. Detail of entrance to larger scale.

Small scale block plan required showing position of lodge in connection with cemetery entrance.

(a) or (b) HEADQUARTERS FOR O.T.C. AT A LARGE PUBLIC SCHOOL.

Draft Condition.—The buildings, for an establishment of 400 infantry cadets, are to form a detached group, sited on a low plateau overlooking the playing fields, and backed by wooded hills. The lay-out is to be on broad and dignified lines, and to include a paved parade ground, about 7,500 yards super, colonnades, and sheltered areas. The following accommodation should be provided: Drill hall, c. 7,500 feet super; two lecture-rooms; armoury, with cleaning-room and workshop; magazine; reference library; gallery for maps and models; miniature range; orderly-room; offices for C.O.; Coy. Commanders and Quartermaster; storerooms for tools, equipment, and materials; locker-rooms, shower baths, etc. Common rooms for Officers, Cadet N.C.O.'s and cadets; office for Sergt.-Instructors, and quarters for one married sergeant.

Drawings.—Plans, including lay-out and key elevations to $\frac{1}{2}$ -inch scale. Sections and elevation of main buildings to $\frac{1}{8}$ -inch scale. A sheet of $\frac{1}{2}$ -inch scale details.

Dates for Submission of Designs in 1917-18.

	Subj. XXXIV.	Subj. XXXV.	Subj. XXXVI.
United Kingdom	31st Aug.	31st Oct.	30th Dec.
Johannesburg	31st Oct.	30th Dec.	28th Feb.
Melbourne	30th Nov.	31st Jan.	31st Mar.
Sydney	30th Nov.	31st Jan.	31st Mar.
Toronto	30th Sept.	30th Nov.	31st Jan.

NOTICES.

Presentation of the Royal Gold Medal.

A GENERAL MEETING (ORDINARY) will be held MONDAY, 25th JUNE 1917, when the President will take the chair at 5.30 p.m. precisely, for the following purposes:—

To read the Minutes of the General Meeting (Business), held Monday, 11th June 1917; formally to admit Members and Licentiates attending for the first time since their election.

To present the Royal Gold Medal for the promotion of Architecture, conferred by His Majesty the King, to Monsieur HENRI PAUL NÉNOT, Membre de l'Institut [Hon. Corr. M.], Architect of the New Sorbonne, Paris, in recognition of the merit of his executed work.

Mr. REGINALD BLOMFIELD, R.A., Past President, to unveil and formally present to the Institute the portrait of Mr. Ernest Newton, A.R.A., President 1914-17, painted by Mr. Arthur Hacker, R.A.

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H. P. Nénot

HENRI-PAUL NÉNOT, Membre de l'Institut.
Hon. Corresponding Member R.I.B.A.
ROYAL GOLD MEDALLIST 1917.



THE ROYAL GOLD MEDAL.

Presentation to Monsieur HENRI PAUL NÉNOT, Membre de l'Institut [*Hon. Corr. M.*]
at the General Meeting, Monday, 25th June, 1917.*

[The President at the opening of the proceedings expressed his regret that M. Nénot was unable to be present, and explained that he was suffering from a severe attack of bronchitis which prevented his leaving home. The French Ambassador, however, Mr. Newton said, had deputed M. Adrien Thierry, Secretary of the Embassy, to attend to receive the Medal on M. Nénot's behalf, and he would read presently a letter from M. Nénot and address a few words to the Meeting.]

ADDRESS BY MR. ERNEST NEWTON, A.R.A., *President.*

MY LORD, LADIES AND GENTLEMEN,—It is my privilege this afternoon as President of the Royal Institute of British Architects and thus representing the architects of the United Kingdom to present to M. Henri Paul Nénot the Royal Gold Medal for Architecture given by His Majesty the King.

It is customary on these occasions to give an outline of the career of the recipient of this Medal, and although most of us know M. Nénot's history there may be some to whom his interesting and strenuous career is not so familiar.

It is not often that a taste for the austere and difficult art of architecture manifests itself at a very early age, but we find M. Nénot, when only nine years old, already showing a marked predilection, not, as we might expect, for its external and more naturally attractive aspects, but by making a detailed and accurate plan of the "pension" at Villiers-le-Bel. Fortunately this tendency was encouraged by those responsible for his education, and he was placed at the age of thirteen in the atelier of M. Lequeux. Surely the youngest architect pupil on record! At fifteen he entered the Ecole des Beaux-Arts. His studies were abruptly interrupted in 1870 when, immediately on the outbreak of war, he enlisted, fought valiantly and received, as his first decoration, the Military Medal. After the war he served his

* Among the large and distinguished company present were M. Adrien Thierry, Secretary of the French Embassy, the Earl of Plymouth [*Hon. A.*], Sir Lionel Earle, K.C.B., C.M.G., Sir Wm. Goscombe John, R.A. [*Hon. A.*], Sir Henry Tanner, C.B., I.S.O. [*F.*], Sir George Frampton, R.A. [*Hon. A.*], Sir Arthur S. Cope, R.A. [*Hon. A.*], Sir Charles Waldstein, Litt.D., Mr. George Clausen, R.A., and the following Royal Gold Medallists of previous years: Sir Thomas G. Jackson, Bart, R.A., Sir Aston Webb, K.C.V.O., C.B., R.A., *Past President*, Sir Ernest George, R.A., *Past President*, Mr. Thomas E. Colcutt, *Past President*, and Mr. Reginald Blomfield, R.A., *Past President*. The proceedings were graced by the presence of several ladies.

term in the artillery, and so great was his patriotism that it required all the persuasion of his former masters to prevent him from re-engaging in the Army and to bring him back into the paths of architecture and a resumption of his studies at the Ecole des Beaux-Arts. Here he continued to work until 1877 when, at the age of 24, he gained the Grand Prix de Rome. During these years M. Nénot worked in the atelier of M. de Questel and in the office of Charles Garnier, competed in collaboration with M. Oudiné for some important buildings in Belgium, won the competition and was entrusted with the execution of the work.

Many of us would think that after these strenuous years of study, crowned by the Grand Prix, M. Nénot might have considered himself fully equipped and entitled to settle down to the practice of architecture, but he wisely looked on all these years of work as preliminary, and, being persuaded that it was only by a profound study of the ancient masterpieces of architecture that a complete mastery of his art was to be gained, he visited in turn the principal towns of Italy and Greece as well as Constantinople and Jerusalem and finished his tour of study by a visit to Egypt. During his last year at the Villa Medici M. Nénot competed amongst 240 architects for the National Monument at Rome to King Victor Emmanuel, being impelled to compete by the laughing taunt of a very young architect that Italian architects were certainly superior to all foreigners! The prize of 50,000 francs was awarded to him, but the execution of the work was entrusted to an Italian.

M. Nénot then undertook a tour of study in France and a critical and careful examination of buildings designed for every purpose, and with all these years of careful preparation behind him and equipped with this well digested knowledge he entered for the great competition for the rebuilding of the Sorbonne, won it and, after some hesitation on account of his age, he being then only 29, the execution of the work was placed in his hands, but was not actually begun until after he had visited the Universities of Germany, Austria, Belgium and Holland.

I will not attempt to describe this great work which took seventeen years to complete; it is well known to all visitors to Paris and is the subject of a fine monograph by M. Nénot, a copy of which is in our Library.

M. Nénot has carried out numerous other works of importance, but it is with the Sorbonne that his name will always be especially associated.

I know it is expected that the President when he presents the Gold Medal shall efface himself so soon as he has delivered a brief introductory address and leave the stage to the medallist, whom everyone is anxious to acclaim, but I cannot at a time like this hand to a distinguished Frenchman this token of our respect and admiration without telling him, and through him his compatriots, something of what his great country is to us.

It is a tradition that English people do not understand the French, and we may be almost grateful to the war for having revealed France to many who did not know her well. To architects the history and masterpieces of French architecture are of absorbing interest. Its unique Gothic architecture—the picturesque transition from Gothic to the mature and ordered Renaissance—modern work, all in turn, claim our admiration and show us achievements not only of the highest intellectual attainment, but containing always that something more than talent, that touch of personal and national genius so particularly characteristic of French architecture. France can boast of a long succession of highly distinguished architects who have gained their reputation by a profound study and complete mastery of the principles and technique of their art.

All this splendid work can only have been done by a fine people. The very name, France, conjures up visions of a nation with as many facets as a diamond. Every period of its history is brilliant, but the France of to-day is perhaps the most impressive of all. Devoted to peace, although nursing a dignified determination to efface the memory of 1870, when the time came to put that determination into action there was at once manifest in every class and degree a quiet, serene determination to suffer everything, to endure everything and to conquer. Never in the whole history of the world have such battles been

fought as during this war. Never have more heroic deeds been performed, and yet, amidst all these gigantic happenings, the steadfast and unbreakable resistance at Verdun stands out in lurid relief and will be told so long as the world endures. It is impossible to believe that our two nations, having fought shoulder to shoulder throughout these long terrible years, can ever again break a bond cemented by the blood of our sons, but that, for all time, we shall be united by the tie of a friendship based on mutual understanding, affection and respect. This alliance should be proof against the insidious propaganda of that nation which has, to its eternal shame, brought to such perfection the truly devilish arts of lying, false witness and sowing discord.

I can only regret that it is not my pleasant duty to-day to decorate, as well as M. Nénot, a distinguished architect representative of the other Allies. We have already on our list of Royal Gold Medallists the names of famous Italian and American architects, and we may hope, when peace again allows us to pursue our art unhindered, to add to that list the names of architects of those other allied nations who are not yet inscribed on our Roll.

Monsieur Thierry, I now have the pleasure of handing to you on behalf of Monsieur Nénot the Royal Gold Medal. It has already been explained to Monsieur Nénot that, on account of the war, medals are not being struck in gold. This is therefore a token only, and after the war will be exchanged for the Gold Medal.

Please convey to Monsieur Nénot our deep regret that, on account of his health, I have not been able to hand the medal to him personally. I will ask you also to thank his Excellency, Monsieur Cambon, for accepting this medal, through your kind agency, on behalf of Monsieur Nénot.

It is a matter of great satisfaction to us that a famous French architect has been selected for this distinction to-day, as it affords us an opportunity not only of expressing our admiration for Monsieur Nénot as an architect and for the architecture of his country, but also our affection for France and the great French nation. It is one of our defects—or qualities—as a people that we are not demonstrative, and find it difficult to talk about that which we feel most keenly, but even the most reserved Englishman must feel impelled by the circumstances of the times to give some expression to the feelings which burn within him, if it is only to say, "Long live France! Long live our great Allies, and may speedy victory be ours and a real and lasting peace!"

M. Adrien Thierry having received the medal, read the following letter from M. Nénot :—

MONSIEUR LE PRÉSIDENT,—J'ai eu une crise très longue de bronchite aiguë et a peine remis j'ai dû accepter (la mission étant un peu dangereuse) d'aller dans le Pas de Calais visiter Arras, Bapaume, etc. J'ai été émerveillé par la splendide organisation et la belle tenue des troupes Anglaises, mais ce petit voyage m'a bien fatigué et ayant fait venir mon médecin, pour répondre à votre lettre, il m'a interdit durant un mois tout nouveau déplacement.

Je regrette bien vivement de ne pouvoir aller à Londres recevoir de vos mains cette belle médaille si glorieuse pour moi, et je vous remercie de nouveau, ainsi que les membres de l'Institut Royal Britannique, du très grand honneur que vous avez bien voulu me faire en m'attribuant cette médaille. J'aurais été heureux de vous remercier de vive voix et de vous dire toute l'admiration des Français pour votre grand pays.

Confiant dans l'issue glorieuse de la lutte que nous soutenons contre la barbarie, j'ai l'honneur, Monsieur le Président, de vous exprimer ma gratitude avec l'assurance de ma très haute considération.

H. P. NÉNOT.

M. THIERRY then addressed the meeting as follows :—

Monsieur le Président, Mesdames, Messieurs,—C'est un grand honneur pour moi de recevoir aujourd'hui la médaille que vous avez bien voulu conférer à M. Nénot. Il eût su mieux que moi, j'en suis sur, vous dire tout le prix qu'il attache à cette distinction. J'ajoute que personne mieux que mon illustre compatriote n'avait mérité cette récompense.

Je ne m'attendais pas à prendre la parole aujourd'hui devant vous ; je suis heureux toutefois de vous remercier, M. le Président, de vos paroles si flatteuses pour l'architecture française. Vous avez bien voulu aussi parler de vos sentiments pour la France ; permettez-moi de vous dire que nous professons les mêmes à l'égard de l'Angleterre. On vous a dit bien des fois combien on admire en France l'effort admirable de la Grande Bretagne pendant cette guerre. Ce sont là aujourd'hui presque des lieux communs et je ne sais qui pourrait douter de la solidité de l'alliance de nos deux grands pays.

Mais puisque je m'adresse aujourd'hui à des architectes, je tiens à dire un mot de plus. Vous savez l'affection de tous les Français pour leurs monuments historiques ; leurs vieilles pierres ont été parfois détruites ou souillées par un ennemi que rien n'arrête. Je suis sûr que vos cœurs ont battu à l'unisson des nôtres quand vous avez appris ces dévastations barbares et inutiles. Aussi croyez-le bien, vous allez droit au cœur des Français en vous associant à leur légitime indignation.

Messieurs et Mesdames, je vous remercie encore au nom de M. Nénot et de l'architecture française du grand honneur que vous leur conférez.

Mr. WALTER CAVE [F.] : My Lord, Ladies and Gentlemen,—I have been asked to propose a vote of thanks to His Excellency M. Cambon, the French Ambassador, for deputing M. Thierry to attend here this afternoon to receive this Medal. It is always unfortunate when the recipient of the Medal is unable to attend himself, but there are advantages, for it enables us, as to-day, to welcome one of his countrymen among us whom we should not otherwise see. I therefore have pleasure in proposing this vote of thanks to his Excellency, and I will ask M. Thierry to convey to him our sentiments. (Applause.)

The vote having been seconded by Mr. E. Guy Dawber, *Hon. Secretary*, was carried by acclamation, and briefly acknowledged.

PRESENTATION OF MR. NEWTON'S PORTRAIT

The function of unveiling and formally presenting to the Institute the portrait of the outgoing President, Mr. Ernest Newton, took place at the meeting of the 25th June, following the presentation of the Royal Gold Medal. The portrait, a speaking likeness, is the work of Mr. Arthur Hacker, R.A., and was hung at the Academy last year. The unveiling was performed by Mr. Reginald Blomfield, R.A., Mr. Newton's predecessor in the Chair. This was Mr. Newton's last official appearance in the position he had held since July, 1914. It is interesting to recall that his first public act as President in the early days of August, 1914, was to issue an invitation to the profession to meet together at Conduit Street and discuss ways and means of giving assistance to the country in the calamity that had suddenly fallen upon the world. Mr. Newton from the first laid stress on the need to be clear in their own minds as to their offer of help ; it must be definitely a patriotic offer of assistance to the country in its hour of need and at some personal sacrifice ; there ought to be no suspicion that it was help for themselves that was wanted.

Mr. Newton, who has been filling for some time an honorary but very responsible position at the Ministry of Munitions, has been recently appointed Director of the Building Section of the Labour Supply

Department of the Ministry. This section deals with building licences, building wages, alien labour in munition factories, and passports for skilled men travelling to other countries to do technical work. Mr. Newton is serving in this position also without salary. The feeling is general that his presence at the Ministry is a guarantee that, so far as the urgent requirements of the State permit, the interests of all connected with the building industry will be safeguarded.

Mr. REGINALD BLOMFIELD, R.A., *Past President* and *Royal Gold Medallist*, in unveiling the portrait, said : There is one ceremony which is still wanting to complete the proceedings to-day, and that is the formal presentation of the portrait of our President. It is three years almost to the day since he succeeded me in the office which he now holds, in the chair which he has filled with such dignity and address. I need hardly say that he has discharged his office under circumstances of very great anxiety and very great difficulty. I daresay you may recollect that quite early in the war the President of the Institute offered the services of the Institute, and of the large and important profession which it represents, to the Government. The Minister responsible at that time in the late Government received the offer with a discourtesy—I cannot call it anything else—which I can only attribute to a pretty complete ignorance of

the whole situation. Of course we know it is the custom in this country to place at the head of Departments—very important and responsible Departments—gentlemen of undoubted virtue and character, and so on, whose chief qualification is that they really know nothing at all about the subjects with which they have to deal. In that way we get a perfectly unbiassed and unprejudiced opinion, and no obstacles are put in the way of the exercise of their original genius. I need not say anything further about that, except that the President was undaunted by this rebuff, and, being a patriotic man, at once placed his services at the disposal of the Ministry of Munitions, where he has laboured in a most devoted manner for three years, and where, I think I may venture to express the hope, his labours will have convinced the authorities that architects are not all imbeciles and men of straw. Well, the many fine qualities of our President have long been known to his old friends, and during his three years of office he has made many new friends, and I am sure I am justified in saying he has won the esteem and regard of everybody with whom he has come into contact by his tact, his sagacity and ready sympathy. Though he is leaving the Chair, we shall hope often to see him in our midst; and in his absence, owing to the courtesy and skill of our old friend Mr. Arthur Hacker, we shall have his *vera effigies* always before us—in other words, this excellent portrait, which I have the honour to unveil and formally present to the Institute. (Much applause.)

MR. PAUL WATERHOUSE, *Vice-President*: I am going to ask the meeting to bear with me for a few minutes, though it is the end of the meeting. It is customary on these great occasions for the time to be occupied by great men with oratory. You have had the great men and the oratory, and my only excuse for appearing before you to-day is that I learned there was an opportunity of speaking on a subject upon which I would not willingly lose the opportunity of speech. It is true that the subject set for me is the portrait of Mr. Newton. I shall not deal with the portrait, excellent as it is: I am going to deal with Mr. Newton himself. I have known the portrait for four or five minutes: I have known Mr. Newton for many years. I make no secret of the fact that I speak full of prejudice. Mr. Newton is a friend of mine; I am not going the length of saying I am a friend of his; in fact, I think my chance of being ranked among his intimate acquaintance will be ruined this afternoon by the breach I propose to make in that wall of modesty with which he surrounds himself. Had M. Nénot been here I should have attempted to use him as an excuse for breaking into stammering and bad French in order to express, under the veil of a foreign language—I beg you will excuse me, M. Thierry, the word "foreign" no longer exists between France and England—(M. Thierry: "Hear, hear")—under the veil of a friendly language and in the obscurity of my inferior pronunciation, I should

have been able to say with greater freedom some of the things which it is less easy to say openly in English. But there is a rare pleasure sometimes in saying to a man's face the things which one has been accustomed to say behind his back. I have to forgo this opportunity of using the veil of a fraternal language, so I must turn into a sort of English the things I would have liked to make known. You know how much we respect our President: what an excellent President he has been: how he is not only a first-rate architect, but also a first-rate citizen, and how he has thrown himself into the problems of these troublous days. I do not know whether you know the story of the partridge of Paphlagonia: it is a story which was an old one when I was young. It relates of a young man making a speech in the Union at Oxford. Those were the happy days when quotations from Latin were considered the proper ornaments of public speech, and the young men of Oxford thought they must practise for themselves the graces which they would afterwards have to use in the House of Commons. And this young speaker put his Latin allusion at the beginning of his speech. His speech was one in opposition to a motion, and he turned to the President of the assembly, raising his hand in an oratorical gesture, and said: "Sir, it is reported in the *Noctes Atticæ* of Aulus Gellius, on the authority of Theopompus, that the partridges of Paphlagonia have two hearts. Now, Sir, whether or not it be true that the partridges of Paphlagonia have two hearts, at least we can be certain that if those partridges have two hearts they are more than twice as well off for hearts as the Honourable Member opposite is for arguments." (Laughter.) That partridge comes in useful for me to-day. Mr. Newton is one of those men of whom we say "His heart is in the right place." But in how many places! I can say this: if it be true that the partridge of Paphlagonia has two hearts, that partridge is only half as well off for hearts as Mr. Newton. (Applause.) He has had a heart for the Institute, a heart for his profession, a heart for the Ministry of Munitions, and, I know, a heart for his home and his friends. At all events, whichever of those hearts I have come across during these three troublesome years I have found it glowing. Now, really, this is no time for jesting, it is a time for farewell: not for sad farewell, but for serious farewell. We have to say "Good-bye" to our friend Mr. Newton on his leaving this Chair. But in doing so we congratulate him very heartily. He can leave his work here—his other work, no doubt, will go on—he can leave his work here full of a satisfied feeling that, under extraordinarily difficult circumstances, he has fulfilled his very difficult task. (Applause.) I do not suppose his friends ever, for a moment, thought him unequal to rising to these emergencies; but he himself, a modest man, must have sometimes wondered whether he would be able to fill so many posts at one time, and it certainly must be a sincere happiness to him to be

assured, as he can be by those who have met him in those many capacities during this period, that he has fulfilled his duties and their expectations in a complete and remarkable manner. (Applause.) I trust, as has been said before, that he will not really say "Good-bye" to the Institute, and that we may very constantly have his cheering and energising presence amongst us. (Loud applause.)

THE PRESIDENT: I now, as my last act as President, formally accept this portrait on behalf of the Institute. It somehow seems a little indelicate to talk about one's own portrait, but in this case I can very well speak about it as a work of art. I am sorry Mr. Hacker is not here to receive our thanks and appreciation for the fine piece of work he has done for the Institute. (Hear, hear.) I must thank Mr. Blomfield for all the kind things he said. I really hardly know how to thank Mr. Waterhouse. He has said so many pleasant things, and he always has that great gift of putting one in good conceit with oneself. Personally, I am very conscious of many shortcomings, not only in carrying out my duties as President, but in carrying out some of the other duties which have fallen to my lot. But I can say that, at any rate, I have done my best and I have not spared myself. (Applause.) If I have come up to your expectations, that is quite sufficient reward for me. But Mr. Waterhouse, again with felicitous phrase and deft handling, turns defects into virtues, geese into swans, and blemishes into beauty spots. Those in this audience who do not know me must not really believe all the nice things which Mr. Waterhouse has said, because I really could not live up to them; but I am glad to think that my successor will have my old friends—Mr. Blomfield, Sir Aston Webb, Mr. Waterhouse, and all the others who have supported me so warmly—to support him during his term of office. I am giving up with sincere regret, after three years of service, during which I have certainly learned to understand the saying "Uneasy lies the head that wears a crown," even though the crown be only that of the Institute during war time. This is my last official appearance, and, in taking my leave and thanking the Council and Members of the Institute for their support and help, I want to take this opportunity of specially thanking Sir Aston Webb for coming to my assistance at a time when my work at the Ministry of Munitions, which is of a delicate and difficult nature, was occupying a great deal of my time. I hope the work on the Architects' War Committee has not suffered, but, at any rate, I felt I was not able to give the time that should be devoted to it. Sir Aston Webb, although he was full of anxieties of his own, came forward and took the burden off my shoulders, and I would like to thank him personally for doing that. I can only hope, in bidding you farewell, that the same kind support will be given to my successor, Mr. Hare. I regret he is not able to be here this afternoon. I wish him the best of good fortune. (Applause.)

NEW MATERIALS AND METHODS AS INFLUENCING DESIGN.

Discussion at the Fifth Informal Conference held at the Royal Institute of British Architects, 21st March, 1917.

CHAIRMAN: Mr. E. GUY DAWBER, *Hon. Secretary*.

Mr. H. D. SEARLES-WOOD read the following paper:—

When the Committee asked me to open a discussion on this subject I understood that at these discussions we were to deal with actualities, therefore I started by making diligent search for the new materials, and found, as a result, that there were no new materials that could by any stretch of the imagination be capable of influencing design. I therefore made a search for new methods, and probably owing to the distraction of the war I found very few methods that could be called new, and none that were of sufficient importance to affect design. The following is what I found. The new materials were corrugated asbestos sheets, which are used as a substitute for corrugated galvanised iron, and, owing to the great difficulty in getting any galvanised materials, may have a future before it, but no artistic merit. There are various new processes for waterproofing concrete, which are useful but do not affect the æsthetic treatment of concrete.

There is a Committee sitting at the Imperial Institute to interest architects and builders in woods from India, Nigeria and the Colonies; these woods are nearly all hard woods most suitable for joinery and furniture, but having regard to the difficulty in obtaining steel some of the cheaper hard woods may be used in the place of steel for stanchions and girders. The new methods I found were, Mr. Isaac Shone's "Cunta in Unum" system of house drainage that has a certain æsthetic value, as it reduces the macaroni-like decorations that the plumber inflicts on our designs under the plea of sanitation. I believe this system has a great future before it, but it wants energetic pushing, as it is opposed to the teaching and practice of sanitary experts, and the methods that the public has been taught to consider as the very gospel of hygiene.

The development of central heating, that is, the delivery of hot water to dwelling-houses for all sorts of purposes, as gas and electricity are now supplied, appears to be a business proposition, and if logically carried out might go some way to settle the domestic servant difficulty, and would result in important modifications in house planning in towns. But I could not find any description of any place where it had been put in actual practice, though such buildings as the Liverpool Hospital, where central heating is largely developed, show what the possibilities are. I have estimates on the basis of 50 houses of the rental value of £140 per annum to supply 80 gallons of hot water per diem for a hot water rate of £12 per annum, or, if a combined scheme for electricity and hot water were made, the hot water rate could be reduced to £5 per annum.

In America and Canada a device called a cement gun is being largely used for exterior stucco and interior plaster work. In principle the cement gun consists of two superimposed tanks, in the top one of which are dumped the dry materials constituting the mortar. From the bottom one the dry mixture is ejected by compressed air through a hose line with a nozzle at the end. To this nozzle a second and smaller hose delivers a supply of water under pressure, which is applied to the dry constituents just before they emerge from the nozzle. The mortar issues from the hose in the form of a spray with considerable force, and impinges on the surface to be plastered. It is claimed that the high pressure with which the mortar is applied produces an adhesion and strength that cannot be equalled by hand-applied methods.

The Eland joinery is a method for dispensing with the usual mortice and tension in joining and to produce a joint that is stronger and more easily assembled and interchangeable. It is an adaptation of the hand-rail screw, and for framing is a great saving of time and labour. The horizontal members can be either continuous in a straight line or can be staggered, so as to make a simpler joint.

There are several forms of blocks for building walls and partitions now being largely used in buildings in our parks and open spaces to house the new army of lady civil servants. One called "The Grip," which consists of 2½-inch or 3-inch terra-cotta slabs about 1 foot 3 inches square, and has diagonal grooves forming a lattice on the surface in which steel reinforcing bars are laid and the whole surface cemented over, is a strong form of this method; but none of these seemed to give any scope for discussion.

Faint, though pursuing, I asked the Office of Works to allow me to see the drawings of what they were doing for the munition buildings, in the hope of finding something there. I found no new materials, but perhaps some of their methods may be of interest.

The problem the Office of Works had to solve was to provide the accommodation required with the greatest possible dispatch, and with the limitations imposed by the difficulty of getting materials.

The result is that these buildings are constructed largely of wood. The big stores, 1,000 feet by 120 feet, are roofed by Belfast trusses of 60 feet span, formed with 4 inch by 1½ inch battens fixed with cut nails clinched, which are found to be better than bolts. On these purlins are laid and then boarded, it being difficult to get curved galvanised corrugated iron. The boards are covered with roofing felt laid in the same direction as the boarding and lapped against the wind. These buildings are lighted by skylights in alternate bays; the trusses are spaced 12 feet 6 inches apart. The skylights are glazed with one or other of the patent forms of glazing. The walls are timber framed, covered with ¾ inch rebated feather-edged boarding creosoted on the outside. The trusses are supported in the centre by wooden pillars

built up with 9 inch by 3 inch deals; the feet of the pillars are bedded in cement concrete blocks.

The flooring is generally cement concrete, sometimes reinforced, as it is not unusual to have shells piled up so as to give a load of 1 ton to the square foot. In covering large areas like this the question of levelling the site is a considerable difficulty, and it is found that a fall of 1 in 100 is not noticeable in the length of the building, and to save raising a floor 10 feet at one end is a great consideration. The effect of these 80 Belfast trusses, which are mere latticework and centre pillars in one of these stores, which is about 22 feet high, is quite impressive. One interesting point is that the level of the floors is taken at the level of the floor of the railway truck; these trucks are higher than the trucks used in the works which run on 2 feet tracks, so that these tracks are raised to bring the floor of the light trucks level with the floor of the railway trucks. Between the light trucks and the floor of the sheds there are trenches in which the workpeople stand, so that the shells standing on the floor of the shed are just bench high, and they can be manipulated with great ease. The result of this is that the shells never have to be lifted, but can easily be transferred from place to place. The rails of the 2 feet tracks are made of wood, with the edge protected by a steel strip rebated in the wood to take the bearing of the truck wheels.

In other workshops the roofs are of the saw-tooth pattern, constructed of wood, and these have wooden lattice girders with 4 inch by 1½ inch cross braces, and 7 inch by 2 inch top and bottom members; these are duplicated when shafting or cranes have to be fixed, and the conveyors or runabouts are similar, only with a rolled joist for the carrier to travel on, and the girders are supported with wooden tressels. The mess-rooms, kitchens, and offices are built with wooden framed walls, with breeze or terra-cotta blocks; the "Grip" previously referred to being sometimes used and sometimes 4½ inch brickwork, which is afterwards tarred. The roofs are often slated.

The only protection from fire from sparks from the engines is to limewhite the woodwork. In some of the sheds where special processes are carried out the walls are lined with white American cloth; it is found that this can easily be kept clean. The internal gutters in the Belfast truss roof are wooden box gutters, finished with felt and asphalt.

One of these sheds had to be built on a foundation of mud pumped out of the river, 16 feet deep. This was dealt with by means of a concrete raft, and a number of women were engaged in this concrete work. In this shed the returned empty cartridges and packing cases are repaired and refilled, and a large saving is thereby effected. The gas shells are tested by placing a cover over them with rats or mice in them, and these show if the shells are leaking; if they are found defective they are taken to a special building which contains gas cupboards, where the leaks are stopped without the gas affecting the workpeople.

A shell factory now being erected in reinforced concrete construction, covering 2 acres, was started on the 15th January, and one-fifth was finished on the 3rd of March. This building is one storey high, with a gallery; it has a saw-tooth roof, which with the beams carrying the plumber block and gangways to oil the bearings and open the ventilators and attend to the artificial ventilation, are all of reinforced concrete; there is only 39 tons of rolled steel in this building, in addition to the reinforcement, and all the steel is shell discards stressed up to 10 tons to the inch. There is nothing new in the application of the reinforcement. The speed of the work is due to the foresight used in arranging for all the materials to be on the site within a week of the start. The centering was one fourth of the area of the concrete. The cost was much less than a similar framed steel building, and it has the advantage of being fire-resisting. These buildings are quoted to show what is being done under present conditions, where restricted materials affect the question of design, and the last building brings me to what is not exactly a new material, but which will afford a subject for discussion, which none of the others, I am afraid, would.

I have tried to get illustrations of some modern reinforced concrete work, but in most instances have been told that the War Office will not allow them to be shown; but Mr. Percival Fraser has some interesting photographs of his recent work for the Maypole Dairy Company which show very original treatment of reinforced concrete for their margarine factory at Eltham, the place where the nuts are stored that the margarine comes from.

Professor Beresford Pite read a paper on the subject of reinforced concrete which I have his permission to quote largely, and which appears to me to bring out just the points that the subject was meant to give for discussion.

"I. There is no common artistic sense or experience which will enable the educated and cultivated world of to-day to accept the native and naked facts of a reinforced concrete building of ordinary purpose, such as a warehouse or office block, as anything else but barbarous, apart from some harmonious relation to, and reflection of, traditional architectural forms and proportions which by long usage and historic meaning have established themselves as alphabets and symbols of artistic expression in the building arts. Proportion in the abstract, as good or bad, is easy to talk about; it may be poetical, but is difficult to embody and unpractical. It would be idle—and this subject is a delightful *corpus vile* for exemplification—to direct an architect that his reinforced concrete building must be simply true to its material and purpose and rely only on good proportions for success and artistic effect. There is a good deal of professional and critical cant to the tune of the sufficiency and pre-eminent importance of good proportion. Let us suggest a simply corrective question: What is the canon of proportion that the prescriber specifically has in his mind's eye? If it is an indefinite perceptive sense of fitness, please apply it forthwith to this concrete case, wherein the height of every floor and practically the size and shape of every opening in the walls is settled by canons of use and practicability, whether warehouse, hospital ward, or mammoth residences. Queen Anne's Gate Mansions, Westminster, may, with all due

respect to their inhabitants, be suggested as a sufficient example of proportion settled by practical canons without reliance on architectural style or ornaments.

"II. Therefore, in the absence of artistic power to educe beauty out of the utilitarian factors of reinforced concrete building, we are compelled to adopt and adapt those past architectural forms which have canons of proportion and have attained by long acceptance a force of expression. These architectural forms are of age-long growth and development, and though they come to us in stone and brick, and therefore seem unsuitable and unreal if applied to a novel artificial material, we have none other with which to make that public appeal for sympathy which is the basis of the artistic sentiment.

"To put it crudely, the Classic forms of Greece and Rome, the Gothic forms of England, the Renaissance treatments of Italy, are after all the staple of the only possible architectural treatment of the reinforced concrete architecture of to-day.

"III. A third brief conclusion is that the application of colour, whether in simple tones or various patterns, to the surface of concrete buildings, though such treatment may be purely æsthetic, will not suffice as a satisfactory or as an architectural solution of the problem. The concrete mass necessarily has colour of some sort, whether, perhaps, the grey of a cement or the pink of an aggregate. This colour quality, which may be said to be native, may be modified for æsthetic purposes, but it really appertains to the texture of the building, and belongs to another branch of the subject. The propriety of securing an even consistency of tone or a clean contrast between applied cement dressings and the general surface of the wall is, however, to be mentioned here. The application of colour implies a direct intellectual exercise in æsthetics of considerable range. It also involves differences of colour material, though essentially between the red and white colour washbands of a sunlit Oriental front and the marble veneers of a mediæval Venetian palace there is little difference of æsthetic treatment. Each method is obviously applicable to walls of any core, from Babylonian earth mounds to reinforced concrete partitions. The æsthetic treatment of concrete would soon be settled, and its practitioners assigned positions in schools of painting and decorative art, if a superficial treatment were sufficient, whether in economical distemper or costly marble and ceramics. Imagination will soon fly to the Baghdad markets for tile, and to Byzantium for mosaic, and neither association nor scope will be lacking. But how in any scheme of superficial decoration shall we deal with the new problems of plastic form and design? Colour may be a palliative, an enrichment of surface, in that it accepts and does not control the forms of the building to which it is applied. Its application does not deal with the greater principles and factors of architectural effect, those of proportion, of light and shade, of grouping and of ornamental detail.

"IV. A fourth conclusion is, that in texture alone—that is, in the quality of the surface—lies the ultimate differentiating quality of the æsthetic of any building material, and especially of reinforced concrete. The architectural elements of a style may be all simulated in stucco, or, if of stone, even to the reproduction of pseudo-constructive jointings, and of such originally economic mason-craftiness as rustication. The vital æsthetic difference is that of texture. The simulation may extend to the superficial elements, but when detected, as it inevitably will be, under the stress of natural forces, the æsthetic value is sensibly lessened, and with the repulsion of artistic sense and sympathy condemnation follows. The feature of native materials has a special beauty; that of artificial materials, as of brickwork acquired by craftsmanship, both of manufacture and of laying and bonding, also has intellectual interest. It is to this essential or native character in concrete that we must look for its expression of texture. Though there is a touching interest in the impress of the timbering on the concrete work of the Roman Emperors,

modern fancy shuttering cannot be suggested, for there will be no lasting result from mere sporadic impulses of imagination. The creation of rusticated joints by sinking moulding fillets, or such-like methods of creating a surface design, need not be even proposed, for texture is that element which is solely necessary to, and therefore indispensably connected with, a certain material, and by which you may identify and appraise it. It applies not merely to the detailed description of smooth joined or rusticated treatment of a cement surface, but to the character of the area, its extent, and the necessary absence or presence of jointings, and other evidences of construction.

"The influence of texture is mainly felt in the design and treatment of ornamental detail. The relation of material to design compels attention in such ornamental details which involve consideration of facility or difficulty of execution. A hard and intractable material naturally restrains the mouldings and carving which are designed for execution in granite, while the surface of a pliant, easily wrought brick or stone wall suggests enrichment and delicacy of moulding. The suggestiveness both of modelled or cast mouldings and enrichments in plaster is also of a different character, and this difference is the texture. Modifications of form in the drawing of detail, owing to increased durability of the material, should be welcomed and insisted upon as emphasising a characteristic which it is foolish and timid to disguise. The absence of building-up joints is alone sufficient to afford a fine speciality to concrete design. The jointing of stonework, originally a painful necessity, as the ancient use of monoliths shows, has become an artistic resource of great value, artificially rusticated joints bearing evidence to this fact. The value to scale of such jointings is primary, but their relation to texture is certainly not to be forgotten. In concrete we have now monolithic walls, and this is fact and texture at once. The other quality of scale lost through the absence of jointing will have to be recovered by other architectural factors of detail.

"The summary of the brief conclusions that we have stated on this subject of unusual magnitude is negatively that:

"i. We have found no instinctive guidance towards an unbiased and fresh originality in the æsthetic treatment of both a novel building material and principles of unusual application.

"ii. That invocations of good proportion or of other abstract principles, though useful as weapons of criticism, are similarly of no assistance in creating a system of design.

"iii. That superficial colour treatments are insufficient for architectural expression, though valuable in assisting æsthetic effect.

"iv. Positively, that the texture of concrete surfaces modifies and imparts special character to any forms employed for architectural purposes. Therefore, while modern considerations of utility and of novel constructional methods determine the proportions, and may spontaneously—or subconsciously, if this may be proposed—develop qualities which acquire an æsthetic character, the only method by which definite progress in an architecture of concrete will be possible to us is by the scholarly and critical employment of the traditional plastic forms of architecture, modified by, and adapted to, execution in concrete."

I have given this long extract from Professor Beresford Pite's paper because it seems to me that these conclusions are equally applicable to other materials and methods of construction, and they are admirably adapted for opening such a discussion as is proposed to-day.

Referring to the suggestion of subconscious determination, I have one other quotation, and then I have finished. E. S. Dallas, in the preface to his book *The Gay*

Science, says that the author's purpose is to settle the first principles of criticism, and he in more than one direction anticipated by a generation the development of opinion. In nothing is this anticipation more remarkable than in his view of what is now called the subliminary self. This, he holds, lies at the root of all art. Aristotle's theory, that art is imitation, is, in his opinion, false, and has transmitted an hereditary squint to criticism. What art does is not to imitate what any eye can see, but rather to bring into clear vision what is first apprehended only by the hidden soul; art has to do with pleasure, but not alone with the pleasure which the sensual man recognises as such; there is hidden pleasure as well as hidden soul. It is everywhere the subliminary self which is active in art, and the subliminary self to which true art appeals.

Mr. H. KEMPTON DYSON: From one point of view there are no new materials, but there are certain new forms and new applications of old materials. I have made a classification of new materials and new methods in that sense, so as to keep my remarks in order while dealing with a miscellaneous collection of items which seem only to have in common the fact that they together emphasize the necessity of making changes in architectural forms.

I. STRUCTURE.

(a) REINFORCED CONCRETE.

Though the principle of reinforcing concrete by means of iron and steel rods has been in use since the early part of last century, it is only within the last twenty years that it has come into prominence for the construction of modern buildings. It makes it easy to obtain certain special features that require novel treatment, because no general method of building in the past has embodied such features and thus called for their æsthetic treatment. In common with steel, reinforced concrete permits of frame construction wherewith modern buildings may be erected with large window openings so as to afford the greater amount of light that is now in demand. In former times there was not the same call for large windows, nor is there the same insistence even to-day in domestic work. Gothic architecture in certain of its developments, it is true, afforded a wonderful amount of window surface, and consisted to a great extent of frame construction with hardly any panel walling.

Much of modern architectural practice consists in the erection of buildings to serve commercial purposes, and the maximum amount of daylight is desirable, not only from the point of view of economy, but of the comfort, convenience, and health of the workers who are housed in such buildings. One of the chief problems in office construction in cities is to provide ample daylighting, having regard to the narrowness of the streets and the areas at rear. The fenestration or treatment of voids is, therefore, a problem that has to be attacked by the architectural profession in connection with modern buildings. This

at the same time involves consideration of the treatment of the panel walling required between the framework of reinforced concrete or steel. The types of structures to-day are so different from those of the past that a new treatment is required which of itself should stamp our architecture as very different from that of any former period.

If the æsthetic treatment is a logical outcome of the mechanical construction it must be satisfactory once we become accustomed to it and able to appreciate the ability with which the architect has expressed a purpose or conveyed an idea *via* the material and method of construction.

As regards the treatment of frame construction, I for one see no reason to object to the clothing of a skeleton with a veneer of other richer and more variegated materials. The skeletons of men and beasts are clothed with flesh and skin that serve a purpose, and, if we choose, why should we not use tiles, faience, marble, stone, plaster, wood-panelling, wallpaper, etc., on the surfaces of buildings because of their uniformity, cleanliness, colour and other properties?

One can build walls of reinforced concrete very much thinner than those we have been accustomed to construct of stone and brick, and the thin wall is another problem that requires treatment. If reinforced-concrete walls are employed there are difficulties in regard to the finish of the surface. We may either plaster the walls, or mould them with a finished surface, or work a surface after casting. Mouldings can be cast upon flat surfaces with ease, though the form of such mouldings had better be such as can be obtained easily without damage in the removal of formwork; that is to say, undercut mouldings are generally undesirable, and, indeed, mouldings should be used as sparingly as possible to obtain the desired effect. As regards the treatment after casting, we can select the aggregates—i.e., sand and coarse material, so as to give a great variety of texture and colouring, while the surface may be again varied by, say, scraping, scrubbing, chiselling, gouging and hammer-dressing. For economy these labours should be performed so soon as possible after removal of the formwork.

Another feature of reinforced concrete construction is the ease with which cantilever projections can be obtained. The other day I was reminded by Professor Beresford Pite that in Indian architecture there are examples of the development to a considerable extent of cantilever projection in timber, but in such construction any great overhang was only obtained by the superimposition of one cantilever on another. In reinforced concrete but one cantilever is required, and, moreover, it can be made economically of a shape more in conformity with mechanical principles than cantilevers that are made of materials such as timber and stone, into the form of which enter the practical aspects of economy of labour in conversion from the forms in which the materials are originally obtained.

A third distinctive feature of reinforced concrete is the way in which it lends itself to monolithic and continuous beam construction such as was never before possible. Past architectures, so far as I can see, help very little in the treatment of such monolithic and continuous construction. That again should make considerable change in architectural form.

As usually carried out reinforced concrete construction is monolithic and continuous, but there are not lacking advocates of pre-cast work *contra* in situ work. Undoubtedly insufficient attention has been given to pre-cast work; it may prove very economical in certain cases, but it would evidently require a different æsthetic treatment from in situ work.

Reinforced concrete is readily applied to the construction of domes, mansard roofs and lofts, which obviously form important elements in the general grouping and skyline of buildings. One can see also the suitability of the material for the construction of strong rooms, store rooms, basements, tanks, pile, caisson and raft foundations: all these will in some way affect the superstructure and the design.

Another application that comes within the province of the architect is the construction of bridges, which are now being extensively carried out in reinforced concrete.

The material is not only economical, but has the following advantages that were bound to lead to its extensive employment:—

1. Fire-resistance.
2. Immunity from decay.
3. Hygienic properties, being washable and sterilizable.
4. Possessing greater inertia because of its weight and monolithic character, resulting in reduction of vibration as compared with other modes of construction.

(b) STEEL-FRAME CONSTRUCTION.

There is hardly need to refer to the treatment of steel beams in themselves because the changes which they involve in architectural design by enabling larger spans to be employed have been thoroughly realised by architects. They entail a complete change in intercolumniation or the spacing of supports. An interesting study is the derivation of the Orders as the outcome of the materials employed and the facilities for obtaining labour and of transport. If the spacing of supports is much wider than before it seems that the Orders should go by the board, but I must say that I regret to see the Orders discarded for some of the horrors that have been perpetrated in the way of pot-bellied and non-tapered columns, both of which are in conflict with scientific principles of construction.

It is probable that in a few years we shall have a non-corroding steel commercially available for construction, but that will still leave us with the problem of fire protection. If such non-corroding steel is available we shall perhaps be allowed to see rivetting frankly expressed, just as we do the pins in old

half-timber work that serve a somewhat similar purpose to rivets.

Steel-frame construction is quite a special type, and reference has been made, in connection with reinforced concrete, to the use of large windows. Steelwork, of course, enables one to have smaller supports than reinforced concrete, though not always, if we take into account protection against fire and the advantages of monolithic construction in respect to resistance to wind pressure.

The clothing of the framework has been referred to in connection with reinforced concrete.

Steelwork, more than reinforced concrete, has undoubtedly entailed the problem of the adequate treatment of high buildings. We can, of course, if we choose, dismiss such structures from the ken of architecture because of their commercialism, but they have distinct advantages which must be recognised, and I for one do not see why architects should not endeavour to treat them aesthetically. Steel bridges, too, are often considered as solely within the engineer's province, but architects might with advantage be called in to assist in their design.

(c) ARTIFICIAL STONE, BRICKWORK SUBSTITUTES AND FAIENCE.

The surface treatment of concrete has been referred to under the heading of reinforced concrete, and most artificial stones are concrete. When, however, concrete is moulded into block or slab form the treatment of the surface naturally will require to be different. It would be quite appropriate to go in for elaborate ornamentation where the cost of the moulds can be spread over a large quantity and where labour is more under control, as in the shops, and can be more accurate than the labour on the site. It is, however, not right that artificial stone should be treated in exactly the same way as masonry—far too often "artificial" stone has been confused with "imitation" stone. Repetition ornament in artificial stone is easily obtained, as also in terracotta and faience, but it does not seem to me appropriate to have it heavily undercut or of great projection because of the difficulty of execution and cost of such work. Of course, for cornices at a great height it may be necessary to go in for considerable projection.

Artificial stone sills are now much used; labour is saved if the sills are carried right through the wall so as to save the boarding on the window backs, and the weather bars used in ordinary wall and window construction can be done away with.

Artificial marbles now on the market are too frequently imitative of natural marble. This suggests that such materials might be better treated by decorative patterning in colours rather than the usual promiscuous veining.

It is quite possible to glaze and polish the surface of concrete; terrazzo is a case in point, where if white cement be used with white marble chippings a fine effect is obtainable. In granitic finish on the other

hand the surface is merely trowelled and not rubbed down. It might be possible to use with advantage other materials than granite in such trowelled surfaces, and perhaps to remove any skin of cement by acids.

Slab partitions, although of the nature of artificial stone, hardly call for special treatment. Hollow tile blocks belong to the terracotta class and are as a rule plastered. It might be possible to use both concrete slabs and hollow tiles without a covering, in which case the jointing would require æsthetic consideration. Another material coming under this heading is asbestos-cement sheets, which lend themselves to distinctive treatment. Faience, either in the form of blocks or tiles, possesses obvious advantages for modern buildings, and can be appropriately applied to panel wall construction and in combination with reinforced concrete and steelwork construction.

II. LIGHTING.

(a) DAYLIGHTING.

Fenestration in modern buildings is a difficult problem that has been created by a material that was never possessed by builders of the past, namely, plate glass. The treatment of shop windows is a thorny subject with architects, but the problem does not end there. Carried to the extreme, plate glass has led to the creation of certain structures, viz., conservatories and aquariums, that are often attached to modern domestic buildings and therefore cannot be dismissed even by those architects who shun commercial structures. The large window awaits adequate treatment. The splitting up of window panes with numerous wooden or metal bars or leaded comes is much resorted to, but users of buildings know the trouble this entails in keeping the windows clean and their removal is frequently insisted upon. It may be very perverse of some people, but my feeling is that the position should be frankly accepted and an endeavour made to treat large panes of glass satisfactorily from the æsthetic point of view. The provision of large surfaces of glass is not only advantageous in respect to lighting and hygiene but is economical: glass seems to be about the thinnest wall; and though it be true that such thin walls lead to great loss or penetration of heat, a solution of the difficulty might be found in double glazing, which would, perhaps, serve to reduce the noise of traffic. Of course there are other aspects to the daylighting question, such as the use of refracting glass, pavement lights and bulk-heads, reflectors, lantern lights, skylights, fan-lights, glazed partitions, fire-resisting glazing—all of which evidently require special treatment. The gaining of every bit of light in confined situations requires the splaying of window cheeks. The windows, moreover, require to be regularly cleaned, so that some provision therefor might be made a feature in the design, such as permanent cantilevers for suspending travelling cradles or continuous balconies for the use of window cleaners. Obscured

and stained glass lend themselves to æsthetic treatment.

(b) ARTIFICIAL LIGHTING.

Nowadays we have a choice of illuminants, namely, coal gas, acetylene, petrol gas, electric light. The last has increased the value of basements and enabled us in modern buildings to gain advantage from constructing more than one basement. Three basements have already been employed on valuable sites and we may find five or more in use shortly. There is no need to detail the many ways in which artificial lighting can be treated, for architects have already successfully attacked the problem.

III. WATERPROOFING.

(a) ASPHALT.

The War in forcing us to economise has emphasised the desirability of substituting other materials for lead and zinc, such as asphalt. The use of the material for horizontal and vertical damp courses has made basements valuable. The most extensive use of asphalt has been for flat roofs, which leads us to consider the possibilities of constructing ornamental and kitchen gardens on the roofs of buildings by the placing of earth thereon. Not only would changes of temperature be more equalised thereby, but the earth would make a bomb-proof shelter. Pergolas and belvederes would render flat roofs of further utility and pleasant in the summer. It is not beyond the bounds of possibility that in the near future continuous flat roofs may be required as alighting platforms for aeroplanes.

(b) SHEETINGS OF CANVAS, FELT AND BITUMINOUS COMPOSITION.

Tarred paper and the like are now coming into extensive use as substitutes for asphalt, while waterproofed canvas has enabled the provision of awnings, velariums and belvederes. Why not have semi-pergolas and open-air cafés?

(c) SLATES AND TILES OF ASBESTOS AND CEMENT AND SHINGLES OF TREATED WOOD.

Each requires appropriate treatment. Concrete slabs in imitation of weather tiling were used extensively by Mr. W. H. Lascelles for the construction of houses at Croydon from designs by the late Mr. Norman Shaw and Mr. Ernest Newton. Such imitation, while good enough to deceive almost the elect, was, of course, not legitimate, but it gave suggestions for proper æsthetic treatment.

Time does not permit me to deal in detail with other materials except merely to complete the list as follows, the headings of which will serve as reminders of the many directions in which modern architecture requires divergence from the past architectural forms that are too generally slavishly followed:—

IV. INSULATING.

Cork, slagwool, asbestos fabric, sheathing quilt stuffed with seaweed for deafening or sound-proofing.

V. FINISH.

- (a) Plaster and plaster substitutes.
- (b) Paving and flooring.
- (c) Carcassing.
- (d) Wallpaper and panelling.
- (e) Paints and decay preventers.

VI. JOINERY.

- (a) Wrought and cast iron.
- (b) Reinforced concrete.
- (c) Papier maché and asbestos-cement.

VII. EQUIPMENT.

- (a) Sanitation, plumbing and water supply.
- (b) Ventilation.
- (c) Heating.
- (d) Cooking appliances.
- (e) Lifts and staircases, hoists, cranes and conveyors.
- (f) Fire escapes and fire-protection.
- (g) Lightning protection.
- (h) Furniture and metal fittings.
- (i) Decoration.
- (j) Fencing.

Mr. PERCIVAL FRASER [F.]: I would like to add my thanks to those expressed by the Chairman to Mr. Searles-Wood for his excellent Paper. It is right up to date, which is not always the case, I am afraid, with Papers read before this Institute. I think Mr. Searles-Wood should have fixed a period or epoch in which he could have categorised his "new" materials. Does he consider cast-iron, for instance, among the new materials, or does he include constructional steel or reinforced concrete? Up to the introduction of cast iron and, later, wrought iron and steel there had been no marked effect on architecture by the influence of new materials or methods of construction for hundreds of years. But from that time till to-day it seems to me that almost every decade witnesses a striking change in construction, and consequently in architecture. This, I think, is very different from Professor Beresford Pite's conclusions, which, I may say, I disagree with almost in their entirety.

Glancing through the Paper, I note Mr. Searles-Wood says that after a "diligent search for new materials" he found that "there were no new materials that could, by any stretch of imagination, be capable of influencing design." That is a tremendous statement to make, and one I emphatically dissent from. My point is that what influences the shapes of construction should, automatically, influence design, and any attempt to combat that influence is wrong. And it seems to me there has been a very strong attempt, in past years, to mould materials to conform to traditional schools of architecture, which, I think, is bad from the very root. The author has, apparently, found only one new material, and that is corrugated asbestos sheets, but these, he says, have no artistic merit: we can concede, however, that they are superior to galvanised iron in colour and texture.

The material he mentions for partitions is very good. I have used it for unsupported panels, 21 feet by 15 feet, the finished thickness being about $2\frac{1}{2}$ inches. Here, for instance, we have a material which is bound to influence design. Belfast roofing, again, which is built up practically of scraps of timber, is cheap and particularly useful. I have used it for spans of 102 feet clear, and here we have a new method of construction which must instinctively influence the architecture of the building in which it is employed. I am glad to note that the author touches largely upon industrial buildings. My impression is that in the past ten years there has been a growing tendency on the part of factory owners to beautify their buildings, and I find this tendency increasing. Nowadays, if an architect takes the trouble, and persists in his point, he generally succeeds in getting the building owner with him in the end, with the result of a good-looking building and a real asset.

Passing on to the quotations from Professor Pite's Paper, I heard that Paper read some years ago, when it was rather a mystery to me, and I believe to many others who heard it. As I read it, he says, for instance, that a reinforced concrete building of ordinary purpose cannot appear to the world as anything else but barbarous. In the absence of any possibility of understanding what he means by that, I can hardly argue against it: but that a building frankly illustrating its purpose in its type of construction should be deemed barbarous seems to me to involve a misnomer, for that is precisely what it is not. Barbarous means something which is other than scientific in design and construction. A warehouse or an office building affords or should afford great evidence of science and art, for it is a standing monument of the two. The Professor instances Queen Anne's Gate Mansions, Westminster, as proving his point that good architecture does not wait upon good proportion; but it seems to me that can only be instanced as a deplorable example of a lost opportunity. There is no doubt a block like that, especially owing to its possibility of being seen from a considerable distance across St. James's Park, might, with real treatment by a real architect, have been made a magnificent pile of distinctive design. As it is, it is particularly impressive by its mere bulk.

Professor Pite says that colour treatment will not suffice as a satisfactory or as an architectural solution of the problem. But I do not agree with him again there. Of course, colour treatment alone cannot be a solution to an architectural problem, but if the architect has designed his building for colour treatment, the two must run together, and, if properly carried out by a qualified architect, are a solution of the problem. If the result is successful, I say the colour treatment, from its inception, has constituted the solution of the problem. He goes on to say—which seems contradictory—"the application of the colour implies a direct intellectual exercise in aesthetics of considerable range." Of course that is so, though a

little before he seems to decry it as a dispensable appanage.

With regard to the effect of new methods on both construction and architecture, reinforced concrete perhaps must form the best basis on which to develop one's arguments; and in reinforced concrete we have a number of essentials which, in my opinion, must or should affect buildings architecturally. Many of those essential points have been mentioned by the previous speaker, but, among others, the following stand out as strongly governing design. First, the unique monolithic construction; then there are the possibilities opened up by the extraordinary lightness of construction, and again by cantilever and bracket effects. Also the feasibility of suspension from above, useful, say, in the case of fan vaulting, the ease with which sunk panels can be formed, and cylindrical and barrel motifs. And, almost the most important of all, the fact that, given a suitable ornament for casting, this can be repeated in the building indefinitely at low cost. Assuming that reinforced concrete is being handled by an architect with a proper perception of what is artistic and proper, he has a material which can be moulded into decorative constructional features (that is, not appliqué ornament, but cast in the carcase of the work), and it must be found to affect the architecture of that building.

Another material which should have a very great effect on architecture is steel. The influence of mild steel construction on engineering works is beyond all calculation. From it we get constructions like the Forth Bridge, which, I think, is an admirable example of the use of a new material automatically building up a new school of design. And then, of course, we have the awful example of the Tower Bridge, in which a very great opportunity has been missed, one which should have been turned to good account. To my mind, it is somewhat of a slur on the architectural profession that these two materials have not had more influence on architecture. I say that materials like mild steel and reinforced concrete should revolutionise architectural design, but there seems to be always that strong tendency to distort the new materials to conform to architectural tradition, which I think is so extremely bad, and it argues a paucity of ideas, a lack of courage, or inadequate scientific training. The true influence of steel construction is demonstrated in Mr. Joseph Pennell's "Unbelievable City," New York, and elsewhere in the States. Whatever opinion one may form of the architectural merit of the modern skyscraper one must admire the courage with which American architects have endeavoured—often with conspicuous success—to adopt the traditions of architecture without crippling modern industrial needs.

That skeleton steel construction is capable of æsthetic treatment is illustrated by the Pennsylvania Railway Terminus in New York. In the construction of that building no endeavour has been made to cloak the steel work, and the effect is excellent. This

new architecture is also common all over the Continent.

The new materials which Mr. Searles-Wood could not find are, in my opinion, very large in number. Mostly they have been mentioned, but I would instance the following in particular. There are the bitumastic roofing felts, which permit flat roofs at a low cost, and, for that reason, influence design. There are the metal window sashes and shop fronts designed frankly for expanses of plate glass, which has given rise to a school of architecture to be known, I suppose, as shop-front architecture, with, I hope, a great future before it. Then there are terra-cotta and glazed facings, such as are seen at the South Kensington Museum and the Savoy Hotel, in both of which an endeavour has been made to design a building in accordance with the materials at hand. Then there is fibrous plaster for decorative work and artificial stonework for external walling. Also we have recently seen a revival of timber construction, which I trust has come to stay. There is, again, the lattice girder roof construction which allows of a free floor area running into upwards of 70,000 feet in my own experience. A construction which permits of areas of that sort is obviously eminently suitable for many forms of manufacture. There is also asbestos for tiles, a suitable material for temporary buildings, patent roof glazing, wall-papers, electric light fittings, heating appliances, special paints, distempers and plasters. Then, again, special pavings, such as the "stone-wood" type, which are decorative, cheap and hygienic. One could go on almost indefinitely categorising new materials, all of which, I say, must or should, in greater or less degree, affect the architecture of to-day.

To deal exhaustively with the subject which Mr. Searles-Wood has so ably introduced would involve the separate consideration of each new material and method of construction with an endeavour to define its possibilities; thus only the architect can ask himself: "What is the legitimate use of this new material and will it afford me a wider sphere for my work?"

Sir HENRY TANNER, C.B., I.S.O. [F.]: I was asked if I would attend this meeting and I replied that I did not know of any new material, and I do not think, from what has been said this afternoon, that my opinion has been changed. What we come to is the development and adaptation of old material which has been in use for very many years. Plate glass was in use when I was a boy, also steel and cast iron. But what we come back to is, and what we have to do nowadays is to adapt our old material to modern uses. That is what everybody is trying to do, and the effect is judged mainly by the influence it has on people's pockets, especially nowadays or in the future, when nearly everyone is or will be poorer than he was, everything has to be done in a more economical manner. For instance, in America you get a very elaborate-looking building with, perhaps, a cornice 6 feet wide, which is made of sheet iron. The majority

of things will have to be obtained in a cheaper way. Of course, asbestos is not a new material either. I have for years used asbestos sheets for covering hot-water and other pipe chases. Mr. Searles-Wood goes on to speak of wood. Of course, wood is getting almost impossible, and that is what people have not sufficiently turned their attention to, to see what cheaper material they can get to answer the same purpose. I do not think it will be much good to try and get these hard woods from Africa which have been spoken about, unless there is a big demand and a large market here for them. I have tried all sorts of hard wood. Honduras mahogany is very well for ordinary tables, but it is not suitable for hard wear. Then there is wood. I obtained Padouk for a long time, but subsequently there was no supply, and when that happens one is put to much inconvenience: it has been put into the specification, you are told the supply is exhausted, and something else has to be substituted. That upsets your calculations and terms are difficult to arrange. As to central heating, I should not wonder if that were done in London, but a very extensive subway system would have to be constructed at enormous expense to start with. I have used it on rather a considerable scale in such instances as the Duke of York's Military School, Dover, and some hospitals. I think all the things which have been mentioned are more or less adaptations of old materials. When you come to speak of plaster, it is very similar: the blocks are simply developments. We began with concrete blocks and that has been gradually developed, so that now there are plaster blocks or slabs. As previous speakers have said, reinforced concrete is bound to alter the construction of buildings: whether it will alter their general appearance is another matter. The tendency is to cover them up and to treat them in the same manner as buildings constructed with steel framing. I do not know whether anyone has had experience of sawdust floors, but they make a very neat flooring, for a time. If water has access, however, and the concrete floor below is at all porous, the acid which is used in the covering attacks the steel joists and they are more or less destroyed. I do not think there are any other observations I have to make, except that steel, at its present price, is so extravagant that every effort should be made to cut it down. I should think that not only is reinforced concrete of great advantage, on account of the small quantity of steel required, but it would be more desirable still if we could get some modification of the Building Bye-laws in regard to the use of steel in London. It is unnecessary to give a 25 per cent. factor of safety, especially when the floors are of concrete and steel joists; one-third is ample in many cases.

MR. MATT. GARBUTT [F.]: I am surprised to find some of the ancient American methods spoken of as either new or as having anything to recommend them. I recollect that thirty years ago some enterprising people in Brownlow Street, Holborn, were

putting on the market certain stamped tin sheets, by the nailing on of which they claimed that any building could be converted into a fine work of architecture. A man from Boston "put the architecture on," and it could be painted any colour you liked—granite or anything else. I am surprised to find it mentioned as something either new or admirable. What is Art? What is architecture? These munition buildings, which are frankly put up for two or three years' service, and are not likely to last more than ten years, may be artistically done, but are they architecture? They are temporary, ephemeral things, good in their way and for their purpose. Should we regard them as serious work? They can be made to look æsthetic and satisfactory, but I do not think that they should be regarded as coming within the scope of this discussion. As regards imitation, there you are up against a principle on which there has been much dispute; for since the world began it has been the practice to imitate one material in another. Mr. Dyson referred to the simplicity of cantilever work as being a virtue peculiar to reinforced concrete. Cantilever work arises naturally. Cantilever brackets prevailed all over the world, but they have gone out in the last century or two, because we have ceased to put up pure timber frame-work building. The typical bracket, I suppose, belongs to China originally, though it seems to prevail over the whole East.

MR. FRANCIS HOOPER [F.] pointed out that some of the suggestions were almost impossible under present building bye-laws. The authorities were prepared to do things now which they opposed before the War. The time then was opportune for taking some step, so that some at least of the methods put before the meeting could be applied, and he suggested that the Council of the Institute might move in the matter.

THE CHAIRMAN: I must say I agree with Sir Henry Tanner. I was taken with surprise on hearing designated as new materials many with which we have been acquainted all our lives. The only really new material we have to deal with is reinforced concrete. That, in commercial and public buildings, is going to revolutionize building in this country. There is no question that for commercial buildings we shall never return to the expensive, bulky walls and structures that we have been accustomed to. The introduction of ferro-concrete has, again, altered our outlook upon the architecture of buildings. We are agreed that it is a mistake to attempt in one material to imitate another. To make what is practically a plastic material like concrete to imitate in its decorative treatment stone or brick is wrong; it should be treated entirely as a new material. You get dignity and character out of any material if it is rightly adapted to its end and purpose.

One of the speakers raised the point as to whether these reinforced concrete buildings could be rightly clothed with a veneer of another material. I think if

that material is treated as a veneer purely and frankly, and not meant in any way to disguise or to imitate another construction, it is certainly legitimate. With regard to other materials, it is evident that we shall have to face the fact that wood will be difficult to obtain for many years to come. That, in one way, will be an advantage, for we shall be compelled to use material which is fireproof, and economical in the matter of space. There is one thing that this marvellous amount of building we have put up during the last two years has done, and that is, to bring out the ingenuity of our engineers and architects. Enormous buildings have been erected, the main necessity of which has been cheapness, rapidity of construction, and the use of the materials at hand, especially timber, much of it small scantlings, and of very poor quality. These buildings are not meant to be permanent, but they have brought out in a wonderful way the resourcefulness and ingenuity of our designers, in producing the wide span roofs that Mr. Percival Fraser referred to. So much we have to thank the War for; in former times we should have depended upon steel construction, whereas now we have to depend on the materials we have in order to produce the quickest construction. Another point I would make is, that this cheapness of building, this reinforced construction, will make us consider the question of our hospital construction of the future. It has always seemed to me that with the development of plan, treatment and outlook of our hospitals, and the advance of medical science, we have in the past made a great mistake in building these structures in such a massive and permanent way. We have spent vast sums of money, only to find in a few years' time that the buildings were out of date in planning and construction. I think that with the new methods of treatment—for surgical cases at any rate—that the war has necessitated, our hospital planning will be very different in the future, and that we shall erect buildings in a more economical manner, so that in a few years' time they can be pulled down, and put up on other sites in another way.

Books Received.

- Lombard Architecture. By Arthur Kingsley Porter. 4 vols. 80, 1918. \$50 net. [Yale University Press: Oxford University Press.]
- A History of Ornament, Ancient and Medieval. By A. D. F. Hamlin, A.M., Professor of the History of Architecture in Columbia University. With 400 illustrations. 80. New York and Lond. 1917. 15s. net. [The Century Co., New York: B. T. Batsford, Ltd., 94 High Holborn.]
- The Planning of the Modern City. By Nelson P. Lewis. 80. New York 1916. 16s. 6d. net. [Wiley & Sons, New York; Chapman & Hall, Ltd., London.]
- The Italian Orders of Architecture: A Practical Book for the Use of Architects and Craftsmen. By Charles Goussier, A.R.I.B.A., Professor of Architecture and Building in the Royal Technical College, Glasgow. 40. Lond. 1917. 6s. net. [Edward Arnold, 41 & 43 Maddox Street, W.]
- Wayside Crosses. Prepared under the direction of the Advisory Committee of the Wayside Cross Society. Pamph. Lond. 1917. [Chiswick Press.]
- A Guide to Draughtsmanship: For Architects, Civil and Mechanical Engineers and Surveyors. By W. Horace Smith. With 40 illustrations, including 19 plates. 80. Lond. 1917. 2s. 6d. net. [E. & F. N. Spon, Ltd., 57, Haymarket.]

REVIEWS.

AN ARTIST'S IMPRESSIONS OF THE FRONT.

The Western Front. Parts I.-V. Drawings by Muirhead Bone. Published for the Government from the Offices of "Country Life."

It was one of the rare inspirations of the late Government to send out one of the most accomplished of living draughtsmen to record his impressions of what he actually sees at the Front. Photographs are usually misleading. They misrepresent the scale, and put the stress on the wrong note; and I have always found that ideas of buildings formed from photographs have to be recast in nearly every particular on seeing the buildings themselves. One has only to compare Mr. Bone's drawing of a great gun with a film photograph of it to realise that the latter, in spite of its mechanical accuracy, fails to catch the life and spirit of the thing. An artist, with the sensitive vision possessed by Mr. Muirhead Bone, seizes at once on the idea of his subject, and the subtle resources of his line enable him to present it in unhesitating transcript. The choice of Mr. Bone was the more satisfactory because, though there are many fine draughtsmen among the artists of this country, Mr. Bone has, from the first, shown his enthusiastic affection for the drawn line, a line that seldom falls below the level of his thought, modulating itself instinctively to express each fresh phase of vision; and Mr. Bone's vision is swift and searching. He has the unerring instinct that goes to the heart of the things in front of him, seizing on the essential quality to the exclusion of all that is irrelevant to his conception of the subject as he sees it. It is by his possession of these qualities as an artist that Mr. Bone is so well qualified for the task he has in hand. In the turmoil of war exhaustive accuracy in detail is out of the question. It is impossible to see or recollect everything; what one wants is the salient impression of the things that happen and the place they happen in.

In regard to the latter, to the locale of these tremendous happenings, Mr. Bone's drawings are most vivid. The desolate plains of Flanders, the strenuous labour of the workshops, the enormous power of our guns, the Tanks with their hint of some prehistoric monster, half-grotesque, half-terrible, are all the more vivid because Mr. Bone's method is one of suggestion, not of literal insistence. On the other hand, more must not be expected of it than it sets out to do. No student of military science could find these drawings of value, and herein they differ widely from the very interesting bird's-eye views of Mr. Wyllie, or the line engravings in the Cabinet du Roi, that vast collection made, as we all know, to celebrate the glorious actions of Louis XIV. A large proportion of the plates in the twenty odd volumes of the Cabinet du Roi is devoted to the illustration of his Majesty's military exploits. On the rare occasions when the King took the field himself, Van der Meulen, his battle-painter, went with him, to collect material for his historical pictures. These, of course, were full of detail, but the central

figure is always the King, here unmoved by the perforation in the side of a wretched war-horse wallowing at his feet, there in one of those attitudes of heroic majesty that nowadays appear to be the especial prerogative of actor-managers. But, besides these pieces, there are in the Cabinet du Roi many plates of the besieged cities taken by the Royal arms—Cassel, Maestricht, Mons, Liège, Namur, and the familiar names in the cockpit of Europe that are thrilling us to-day. The draughtsman's method was always the same, a finely designed frame with a bird's-eye view of the town and of the opposing forces. In the plates of Arras the trenches, the strong points and redoubts, the communication trenches and the position of the saps, counter-saps and mines, are all clearly shown; and thus, though "the days of the Beau Geste are numbered," there might seem to be nothing new. Even the German method of attack, in wave after wave of solid masses, is shown in these engravings of what happened over two hundred years ago.

Yet the whole atmosphere of war has changed. These fine engravings of the Cabinet du Roi express exactly the methods of warfare of Louis XIV., its deliberate procedure, its exact and almost punctilious ceremonial. Modern warfare, infinitely patient and scientific in preparation, is yet swift and unexpected in action, and all the gilt is off it. Mud-coloured uniforms, guns and trenches concealed where possible with ingenious camouflage, these are our substitutes for the pomp and circumstance of war. We are back to the bedrock of hard facts and the fierce fighting man, and it is this aspect of war that Mr. Bone has caught with true and vivid insight. He has grasped the imaginative setting of the grimmest conflict the world has ever seen.

As is inevitable in work done under such conditions, the drawings are unequal. Mr. Bone is less successful with his figures than with other aspects of his subject; and certain drawings show a little carelessness as to the atmospheric planes. In a drawing of a ruined church all the parts are equally close to the eye, a fault remarkable in such a master of atmospheric perspective as Mr. Bone. On the other hand, No. 81, "Oiling," a bird's-eye view of the deck of a great battleship taking in oil fuel at sea, is a perfect and wonderful drawing, and I doubt if anyone but Mr. Bone could make such a drawing. He has managed to convey the idea of immense size and intricate detail without confusion: more successfully than in the drawing of H.M.S. "Lion" in dry dock, fine though the latter is. Mr. Bone can draw anything he sees, but I think he is enjoying himself most when he is drawing one or other of two sets of subjects, quite remote from each other. The first is machinery, cranes, or interminable workshops, a whole tangle of fine-drawn lines which Mr. Bone alone can reduce to order, and which show his old admirers that he has not lost the cunning of the hand that drew "The Great Gantry" and "The Last of Newgate." No. 62, "Setting up an Aeroplane in a Shop," No. 64, "The Giant

Slotter," No. 67, "The Night Shift Working on a Big Gun," and of course the first drawing of the Tank, are characteristic and splendid examples of carefully considered and yet most imaginative drawings. At the opposite pole are those delightful sketches, sometimes mere notes, of scenery, which Mr. Bone appears to be able to do "on his head," as the phrase is, so suggestive of far-spreading landscapes, touched in with perfect skill, and the work, apparently, of five or ten minutes by the roadside. Such are No. 73, a train of lorries coming up a road, and No. 24, a delightful drawing of cavalry in the distance, wending its way along a road which meanders through an open rolling country. There are drawings in the collection hardly worth their place, but in those I have mentioned, and in many others, Mr. Bone is at his best, and his best is inimitable.

REGINALD BLOMFIELD [F.].

RECONSTRUCTION.

Préliminaires d'Art Civique mis en relation avec le "Cas clinique" de la Belgique. By Louis Van der Swaelmen. 101 by 7½ inches. 1916. [Leyden: Société d'éditions; A. W. Sijthoff].

The Institute is indebted to the author for the presentation of a copy of this book on the subject of town planning as applicable to the reconstruction of Belgium and the devastated portions of the North and East of France. The author does not dwell on the cruel aggression of the treacherous Hun. His is a clarion call to the world's workers to prepare for the new order which is at hand. Far from being cast down he is full of hope for a glorious resurrection, and welcomes with gratitude the prospect of reconstruction in a better and a worthier way.

The volume is written to stimulate general interest on the subject of not only urban but rural life, and to awaken the civic conscience at this unique time to a realisation of the potentiality of towns as vital and vivid organisms. Keeping this object in view the author has written on those geographical and physical features of sea and river, of mountain and plain, which have given the town its special character and influenced the direction of its growth. He shows, too, how other factors, economic, hygienic, and political, operate in its development and determine its character—be it industrial, commercial, educational, curative, administrative, or otherwise.

A proper study of the problem of town planning must embrace all the scientific and æsthetic knowledge available with regard to each town and village: and all the information that can be obtained concerning the well-being of a community should be collected and recorded. This the author suggests should, after proper classification, be deposited in a suitable building not only for the guidance of the expert whose study it is, but for the instruction of the general public whose interests are at stake.

Within the comparatively small compass of the

volume at hand there has been gleaned a wealth of information which must prove of immense service to those interested not only in the reconstruction of Belgium, but in the future development of communal life. In Belgium, that land of cruel experiences, the author hopes to see the realisation of all our knowledge and vast cumulative resources in a new era which he welcomes in its freshness as a happy substitute for much that was old and decrepit.

The future of town planning is full of promise and we appreciate a prophetic vision which sees towns and villages of true beauty. Cities in their *ensemble* can still be planned with a capacity of expression as real and living as was ever found in the past, and on a scale to rival even the vast schemes of Le Nôtre. Those who are equally inspired will realise them in a splendour responding in growth to a wealth of new ideas.

Mr. Van der Swaelmen is frankly modernist. Though he looks upon the past as a splendid patrimony at the disposal of the town planner who will use it aright, he does not sympathise with the sentimental desire of those who wish to repeat the old as such and who would create a factitious antiquity "odious in its derisive effrontery." Art he sees as a functional emanation of life itself which cannot be slavishly copied from the past. Buildings in themselves have a capacity of expression and need not follow antiquated types. Our great railway stations, bridges, and viaducts, industrial and commercial buildings, hospitals, libraries, baths, State and civic buildings all give opportunity of new expression on a scale of magnitude equal to any of the monuments of antiquity.

Two considerations must always be borne in mind—the material claims of utility and the equally insistent appeal of the spirit for beauty. The author sees harmony arising from the combination of these and expresses his creed as a rigorous adaptation of the object to its purpose in rhythmic beauty. ("L'adaptation rigoureuse de l'Objet à sa Destination est génératrice de Beauté, tout au moins d'Eurythmie.") He sees in modern mechanical appliances a type of industrial beauty which in simplicity and directness is not only expressive, satisfactory, and instructive but should prove a helpful guide to creation in the plastic arts. In Style, which arose in the pre-archæological era, he sees merely the imprint upon tradition of life itself in its effort to create.

Mr. Van der Swaelmen deprecates the dissociation of the treasures of the past from the life of to-day. Following the ideas of Mr. Robert de la Sizeranne, he recommends decentralisation, part of the collections now exhibited in the museums being distributed amongst the churches, the civic buildings, and the education institutes. The works retained would then be arranged chronologically in a series of rooms with an adequate setting so as to evoke the feeling of the epoch to which they belong. In some of our museums this is already being done, but the merely archæological aspect still hangs heavy in the atmo-

sphere, and many of these depositories are still weary wildernesses which have been aptly described as cemeteries of the fine arts.

In Appendix No. 1 Mr. Lanchester's paper on the Civic Development Survey as a War Measure (published in the JOURNAL of 9th January 1915) has been developed for application to the problem of injured Belgium, grateful acknowledgments being made to the author.

In Appendix No. 2 is published an encyclopedic compendium on civic art, containing a commentary on the fundamental principles of urbanisation and an analytical guide for its comparative study, as elaborated by committees of l'Union Internationale des Villes, the International Garden Cities and Town Planning Association, London (Belgium Town Planning Committee) and the Comité Néerlandais-Belge d'Art Civique, The Hague, Amsterdam. This highly co-ordinated section of the book occupies 130 pages and is so arranged that it can be augmented as the subject is developed. It is established on the same principle as the decimal classification in use at l'Institut International de Bibliographie, and is on lines defined by Mr. Paul Otlet; it covers every imaginable subject which bears on town planning, is divided and subdivided on most scientific principles and shows something of the extent of the studies that will be required from those who will be responsible for the work of reconstruction and town planning.

Generally the volume is not only interesting but suggestive. At times there are lapses into scientific words not in general use, accompanied by a somewhat turgid phraseology, but the optimism and enthusiasm of the author are evidence of those vital forces which seem to be growing during the titanic operations of the war, and which will be invaluable in the inauguration of a new and promising era in Belgium.

HERBERT WIGGLESWORTH [F.].

VOCATIONAL ORGANISATION:

Being part of a report of the Committee of the Fabian Research Department on the Control of Industry submitted by Sidney and Beatrice Webb and G. Bernard Shaw. [Special Supplement to the "New Statesman," April 21, 28.]

Quite unknown to the greater public, even to those who, with more or less reason, can be considered as belonging to the minority who are interested in things that matter, there exist a few societies which devote their energies to investigating the causes which have led to the unwholesome type of civilisation in which we live. From the nature of things such a form of activity must necessarily involve a criticism of orthodoxy and convention, and is a work only accomplished in face of dull suspicion and inertia by those who are probably among the more discontented and alert members of the community.

Chief and oldest of these societies is the Fabian Research Department, whose report upon Professional Associations arising out of their general investigation on "The Control of Industry" was published in the

New Statesman as a supplement on 21st and 28th April last. This report, which has been made with a view to discovering from the experience and achievements of the various professions how it might be possible for each to play a more adequate and considered part in the future conduct and control of industries and services, deals with the professional organisation among lawyers, medical men and teachers, painters, sculptors, musicians, actors, writers, and also those who are termed the technicians of industry—i.e., architects, surveyors, engineers and chemists. Nothing quite like this supplement has appeared before, and it is of special interest to architects, as it is a criticism from the outside shewing, in a comparative manner, how the profession has developed in this country.

As far as the architects are concerned, the report commences by reference to an initial organisation of the social club type in 1791, twenty years later than the dining club of the engineers started by John Smeaton.* The development into a permanent Institute came about in 1834, but even then there seems to have been no idea of establishing a large and far-reaching organisation; it was rather an amateur and dilettante association composed of architects and other gentlemen who for several years pursued a respectable and undiscerning course, untroubled by the economic changes which were growing around them.

The report gives a condensed but fair summary of the later history of the profession, which, to a great extent, is the history of the Royal Institute of British Architects, embracing as it does the questions of education, registration, professional etiquette and remuneration: the franchise and eligibility of the governing body and the gradual recognition of the Institute by the State, etc., all of which questions in one form or another it has been the experience of nearly every professional association to have to discuss more or less acutely.

Doubtless quite unconsciously an initial mistake was made in the constitution, or rather the organisation, of the Institute, a point which has not altogether escaped the attention of the Fabian Research Department, as is suggested by the following quotation:—"The function of the architect was not regarded as that of directing and supervising the erection of all the buildings of his country, whatever they were; but only the designing and planning of such among them as were intended or desired to be beautiful." Thus the art of building, hitherto regarded as one, in previous civilisations, was in the last century split up in an arbitrary and illogical manner between architects and engineers, the work of architects being considered to lie in the direction of construction tempered by "fine" art, that of engineers being confined to works of construction and utility, a somewhat raw combination, this dual control of building activity taking the place

* I am reminded by Mr. A. E. Richardson that the following gentlemen started the Architects' Club of 1791:—Robert Adam, Robert F. Brettingham, J. Carr, Wm. Chambers, James Gandon, Thos. Hardwick, Richard Jupp, James Lewis, Robert Milne, Richard Norris, James Paine, Nichols Revett, Thos. Sandby, John Soane, John Yenn.—W. E. V. C.

of the older and more comprehensive organisation under which "fine" construction was produced. This is undoubtedly a development upon wrong lines which adds its quota to the present muddle. Mr. Bernard Shaw, who writes on Professional Association in Literature and the Fine Arts, deals very shortly with "the designing and planning of such buildings as were intended or desired to be beautiful." According to him, architecture by its very nature is related to the Institution of Civil Engineers much more closely than to painters; this is certainly an idea which should be emphasised at the present time. But as presented by Mr. Shaw, without any sufficient context to explain its meaning, the statement can only be regarded as a half truth of a somewhat conventional type, and is therefore misleading in that it overlooks the fact that architectural design is an activity pursued for its own sake, sufficient as an end in itself.

In considering the probable future growth and development of the various professions—architecture included—three tendencies are pointed out as important, due, for the most part, to the increased demands made by a civilisation becoming more and more technical, exacting and detailed: namely:—

1. The tendency toward the supersession of the individual producer or small working master by the capitalist firm on a large scale, whose object is not so much the service of the public as the sale of wares; and still more by the Joint Stock Company and gigantic trust involving the employment of specialised classes of brain workers working for a salary.

2. The tendency of municipal and other public bodies to encroach upon the domain of the private practitioner in the person of its salaried officer.

3. The tendency to split up into smaller organised groups of practitioners, each specialising upon a particular part of the function, rather than that each individual should undertake the whole service.

The due appreciation of these three points is of importance to the architects of to-day and to-morrow: for whether modern tendencies are healthful or otherwise, they exist and have to be reckoned with; they may be controlled; their rigour may be annealed; but they cannot be eliminated, much less ignored.

The report has done what it can for us in conducing to tidiness of mind by setting forth the state of affairs as it exists at present: shewing how this state of affairs has arisen and suggesting lines of probable development. It remains for architects, engineers, and the rest of us to ensure that the readjustments which are now taking place shall be conceived on lines not only beneficial to the individual, which is the method of the Trade Union, but also on lines by which the community may best be served. It seems that the whole of the building activities of the country need better co-ordination—the illogical severance between architecture and engineering must disappear: there is no such thing as a scientific frontier between the two. But very little can be done in this direction

without a cordial *rapprochement* between the Royal Institute of British Architects and the Institution of Civil Engineers. Further, as similarity of interest is the only possible basis for unity of organisation, neither the master builders nor the men can be left out of any scheme that will work. Again, it seems inevitable that the tendency will harden for the salaried official to supplant the architect in private practice.

The experience of the last two years has shewn that it has not been safe for the community to give so much licence to the private venturer who builds or otherwise exercises himself mainly to suit his own pocket rather than for the welfare of the public. But we have yet to learn how to breed and make use of the salaried official, be he architect or any other civil servant: at present his development is at an elementary and incomplete stage. The system in which he is at present embedded is not sufficiently flexible and the individual freedom and responsibility experienced by the architect in private practice is usurped by a hybrid committee or other bunch of individuals, much to the detriment of the official. It is also probable that we shall be driven still further towards specialisation in order that the exacting demands made by modern life may be met; but it must be a specialisation based upon a more humanistic education properly linked up to the whole instead of the present lop-sided method.

This, roughly, seems to be the nature of some of the problems which arise in one's mind from the perusal of this report, problems which it is essential for the coming generation to solve if the values accomplished in the twentieth century are to be greater than the questionable values attained during the nineteenth.

W. E. VERNON CROMPTON [F.].

CITY RESIDENTIAL LAND DEVELOPMENT.

The Town-Planning, or, to use the American phrase, the "City-Planning," movement in the States has been accompanied by a great awakening of the civic conscience, and has in many of the towns of America given rise to the formation of city clubs and societies, whose function is to encourage and direct public opinion in matters concerning the beautification and improvement of their cities.

Previous to a Housing Exhibition which was held in March 1913, the City Club of Chicago inaugurated a competition for the procuring of a scheme of development for a quarter-section of land within the limits of the City of Chicago, and invitations were issued to building and landscape architects, engineers and sociologists, for competitive plans for laying out, as a residence district, a typical area in the outskirts of the city. The programme was drawn up by the Illinois Chapter of the American Institute of Architects. The result was a series of plans of an extraordinary interest, a selection of which, with discussions by the various authors and reviews of the competition by some of the most eminent American authorities on the subject of Town-Planning, has now appeared in

book form under the above title. At first glance the problem does not appear to be either very attractive or inspiring; a perfectly square site, 2,640 feet by 2,640 feet (which apparently is the size of what is known as a quarter-section), bounded on the four sides with main traffic thoroughfares, two of which have existing and two of which are to have future street railways, is not one that the average architect would choose on which to display his abilities. But it is in the fulfilling of the strictly defined limitations imposed by the conditions that the chief interest of these plans lie. The energy of the competitors has been concentrated with a singular intensity of purpose on a narrow issue, and the result has been not a diminished but an increased interest, not only in the plans viewed as a whole, but in the solution of the particular problems of the individual plan, and the comparative study of the series is peculiarly instructive. Space forbids any detailed criticism of the many able solutions which this competition has brought forth, but a brief summary of the essential features may be given by a quotation from a review of the plans by Mr. Albert Kelsey, F.A.I.A.: "The elements of the problem are circulation, hygiene and beauty. Circulation, that is the arterial system, with its parkings, sewers, pipes, wires, street-fixtures, etc., is of first importance; hygiene, or the general salubrity of the tract, comes next; beauty, or the pleasurable appearance of the tract, comes last, but not least in that it represents the harmonious blending of those features which rise from the plan with the plan itself. Thus the plan and its developments are one and inseparable, and, moreover, in an intensive problem of this kind where housing is the main consideration, the design is manifestly an architectural problem from start to finish; though the architect, I gladly admit, requires the invaluable collaboration of an engineer and a landscape architect, just as he requires the invaluable collaboration of a mechanical engineer and a heating expert in the designing of an office building."

STANLEY C. RAMSEY [A.].

The Message of the Artists.

A number of artists have combined to show in a series of lithographic prints the Aims of Britain and her Allies in the War, and also some typical and impressive aspects of our effort against the enemy. The British Aims are shown in a series of Allegories, printed in colour. "The Freedom of the Seas" is rendered by Mr. Frank Brangwyn, "The Restoration of Belgium" by Mr. Clausen. Other subjects are undertaken by Messrs. Dulac, Greiffenhagen, Augustus John, Ernest Jackson, Gerald Moira, William Nicholson, Charles Ricketts, Will Rothenstein, Charles Shannon, and Edmund J. Sullivan. The British Effort is typified in several series, such as "Making Soldiers," by Eric Kennington, "Making Ships," by Mr. Muirhead Bone, and other series by Messrs. Frank Brangwyn, Clausen, Nevins, Hartick, Charles Pears, Will Rothenstein, and Claude Shepperson. The works are now being exhibited in the Galleries of the Fine Art Society, New Bond Street, and are afterwards to go to provincial Galleries.

AD STA PAVLVLM VIATOR.

On Whitsunday died, very suddenly, Thomas Edward Pryce, for thirty-six years an Associate-member of the Royal Institute; and it is desired by his many friends that a few tributary lines may record, in our Chronicles, their esteem and affection for a greatly beloved comrade. Despite the frequent valediction it can be seldom said, with candour, that a man has left this desperate elbow-work of life, regretted by all who knew him. Yet, of Thomas Pryce it is exactly true. His death gratifies no man's malice, brings to none the unlovely solace of a rival's fall, ends no conflict or dispute. To everyone, his thought was kindly and his speech propitious; ill-will and he were not acquainted; envy was, to him, but an idle word. Entirely happy in his lot, he was content with the world as he found it, and coveted nothing but his friends' society.

In older times, such virtues might have inspired a stately epitaph; but we have grown taciturn in the churchyard, and make no discourse of our dead. That form of homage would have been not unfitting, for he was a man of wide reading and well furnished mind, who loved a sonorous phrase. Very like in character must have been the old worthy, of whom it is recorded that he—dust these three hundred years—was "*sine ostentatione probus, sincerus sine cujusdam offensione, sine invidia amabilis, how the portly words recall his presence! inter suos placidus et hilaris, nulli acerbus, there are many mourners at his Club, omnium officiorum diligentissimus, was he not of the House-committee! erga omnes beneficus.*" It might have been composed to his address, so well it fits his memory; yet of how few it would be said without extravagance!

Perhaps 'twere better not. The calm and unambitioned tenour of his life calls for no sculptured monument; he will not be forgotten while his friends live, and he would have wished no larger immortality. He sought no high occasions, and achieved no sounding triumphs in his art, preferring a quiet life with modest reward, to the physical strain (for which he was unfitted) and the relentless anxiety of conducting great works. We may not deck his tomb with laurels, the victor's wreath of bays would be unmeaning; but we lay upon his grave a sprig of sweet rosemary,

"that's for remembrance."

BENE PRECARE VIATOR & IMITARE.

J. W. S.

THE LATE GERALD HORSLEY [F.].

The death took place at Crowborough on the 2nd July of Mr. Gerald Horsley, *Fellow and Member of Council*, at the age of fifty-four. The youngest son of the late John Calcott Horsley, R.A., and brother of the distinguished surgeon and nerve specialist, the late Sir Victor Horsley, he was educated at Ken-

sington School, served his articles with Mr. Norman Shaw, R.A., and studied in the Royal Academy Schools. He was the first to hold the Owen-Jones Travelling Studentship, then, in 1887-88, tenable for two years. He began practice in 1888, became an Associate of the Institute in 1890, but resigned two years later among the group of members protesting against the Compulsory Examinations policy then being introduced at the Institute. Rejoining as a Fellow in 1906, together with most of those who had resigned with him, he had since taken a very active part in the affairs of the Institute, serving on the Council and the Art Standing Committee, and for the past three years as Hon. Secretary of the Board of Architectural Education.

The funeral took place at East Grinstead Parish Church on the 6th July, the Institute being represented by Mr. Arthur Keen [F.] and Mr. Francis Hooper [F.]. At the Council Meeting last Monday the Hon. Secretary, Mr. E. Guy Dawber, referred in feeling terms to Mr. Horsley's death and to the esteem and affection in which he was held by his colleagues on the Council, and it was resolved that an expression of their appreciation of his valuable services to the Institute and to the profession, and of their deep sense of sorrow at his loss be recorded on the Minutes, and that a message of their sincerest sympathy and condolence be conveyed to his family.

MR. ARTHUR KEEN [F.], who had been asked to contribute a brief notice of his late friend, writes:—

It is easier for me to express my personal feeling about Horsley than to give any well-considered description and judgment of his work. I knew him since the day when he entered Mr. Norman Shaw's office as a pupil, and the impression formed there of his kindness, his good feeling, and his courtesy has never varied. He had the most genuine good nature and was liked by everybody in consequence. His regard for his master amounted almost to veneration, and it led him, perhaps, into following the actual forms of Norman Shaw's work in preference to breaking new ground for himself, but he invested all that he touched with his own sense of beauty and fitness. He had a good many opportunities of dealing with important buildings, and the published illustrations of his work show how ably he used them. But it was his astonishing draughtsmanship that was the remarkable side of his work. In the first few weeks of his pupilage he would make copies of Shaw's crisp pencil drawings with such fidelity to touch and feeling that the copy could hardly be told from the original, and Reginald Barratt, who was his fellow-pupil, would do the same. But while Horsley's drawings show the methods of his master, they have the most distinctive personal character and touch. And they are quite wonderful! He could draw intricate vaulting or tracery with the utmost precision and firmness, or he could make beautiful studies of sculptured detail in which the most sensitive accuracy was combined with soft, refined texture. Compared with such drawings as those of Rus-

kin, while there is all the precision there is a certain uncompromising hardness of execution as if he grudged the loss of any single fact that was part of the subject, but there is always such breadth and sense of beauty in the work that his drawings, without exception, are charming. His delineation of old work was, in fact, very much like that of Shaw or Nesfield, and the subtle faithfulness of it is quite remarkable. He was the first to win the Owen-Jones Studentship, and he made very good use of the opportunity it gave him for study and travel. He did a good deal of water-colour work, but most of his drawings are in line, either in pencil or ink.

In his personality he was not strong or forcible, but he acted with such tact and reasonableness that he would carry his point where a more insistent man might have failed. Certainly he was very successful as well as popular in his Presidentship of the Architectural Association, and in all that he did at the A.A., as well as at the Institute, he showed himself capable and dependable; in my opinion the recent developments of the Association were to a very great extent due to his influence.

I shall be corrected if I am wrong (I am away from home and cannot verify it), but I believe he was really and truly the founder of the Art Workers' Guild; at any rate, he was an original and active member and Secretary of it, and did very good service in shaping its activities. We shall always remember him with respect and affection, and the loss we have sustained can never be made good. ARTHUR KEEN [F.].

Among Mr. Horsley's principal architectural works are St. Paul's Girls School, Brook Green; St. Chad's Church, Longsdon, Staffs.; All Saints' Church, Hanley, Staffs.; Painted Roof and Wall Decoration, All Saints' Church, Leek, Staffs.; additions to Balcombe Place, Sussex; "Framewood," Stoke Poges; "Coverwood," near Gomshall, Surrey; offices for Universities' Mission to Central Africa, Dartmouth Street, S.W.; part of station buildings for London and North-Western Railway Company at Pinner and Harrow, etc.

THE LATE WILLIAM ARTHUR RIGG [A.].

"Mort sur le champ d'honneur."

William Arthur Rigg [A.] was killed in France on April 19th last during heavy shelling of his platoon, from which not a man escaped uninjured.

One of the vast number of the splendid youth of our country to whom the idea of war for its own sake was utterly abhorrent, but in whom the sense of duty and patriotism has been so compellingly strong, he joined the Public Schools Brigade as a private. He received his military training at Edinburgh, but while the papers for his Commission were still awaiting completion he was drafted to France, and saw much active service in the trenches before his untimely death.

His career had been full of promise for the future.

After preliminary artistic studies in Lancaster Municipal School of Art and a short period on its teaching staff, he spent six years as assistant to his father in the practical management of his business as building contractor in Carnforth. He passed from there in 1907 to the office of Mr. G. A. T. Middleton [A.], in London, as an articled pupil, and between the years 1907 and 1914 studied successively at the evening classes of the University College School of Architecture (where he was first prizeman in architectural design and Donaldson Silver Medallist), the Royal Academy Schools, and Clapham School of Art, where he took the courses in modelling, drawing from the antique and from life. Maintaining an active connection meanwhile with his native district, he carried out there in private practice a number of interesting domestic buildings, several of which were illustrated in the Studio Year Books. In addition to such manifold activities during these years, he found time for travel and sketching in Belgium, Holland, France, and Italy. Following a period spent in the office of Mr. Robert Griggs in Gray's Inn Square, he joined in 1914 the staff of Messrs. Bradshaw Gass and Hope in Bolton, which he only left to enter the Army.

A training so unusually thorough, at once practical and highly artistic, allied with very considerable natural gifts had fitted him to take a foremost place among the younger generation of architects.

A man of high character and ideals, and with strong individuality, possessing, too, all the typical shrewdness of judgment of the northerner and something more than his share of its dry humour, he was a singularly charming personality and most popular amongst his associates.

He was devoted to his profession, a clever and artistic draughtsman, a hard worker, and a designer of great promise. Withal he had restraint, and the capacity of waiting his time. Such men of sane outlook and fine mental balance can ill be spared in our national life, and he leaves the younger ranks of our profession distinctly the poorer by his loss. Deep sympathy will be extended to his young widow in her sad bereavement.

JOHN B. GASS [F.].

Professional Classes War Relief.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—The excellent work which is being carried on by the Professional Classes War Relief Council is not perhaps as widely known as it should be. Not the least deserving of their many branches in which they give assistance to professional classes is the work carried out by the Maternity Committee. The Maternity Nursing Home, at 13, Prince's Gate, S.W.7, was opened by the Professional Classes War Relief Council early in 1915 for the benefit of the wives of professional men adversely affected by the war. Over 300 babies have been born therein. Application for admission or for assistance in regard to maternity expenses at home should be made to the Secretary.—Yours faithfully,

GEORGE HUBBARD [F.].



9 CONDUIT STREET, LONDON, W., 14th July 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-fifth List.

Fallen in the War.

PONTON, HAROLD FREDERIC [Associate]. Killed in action in France on 29th April.

RIGG, Private WILLIAM ARTHUR, Middlesex Regiment [Associate]. Killed in action in France on 19th April.

McLEAN, 2nd Lieut. JAMES MONTEITH, 2nd Highland Light Infantry [Student]. Killed in action whilst leading a bombing party on 28th April.

Second Lieut. J. M. McLean volunteered for service with the H.L.I. in October 1914 and was sent to Gallipoli. He was granted a Commission in the Scottish Rifles in 1916 and left for France in October last. Later he was attached to the 2nd H.L.I. (Terr.) and finally was transferred into the Regular H.L.I. He was 23 years of age, belonged to Paisley, and before joining the Army was in the office of Mr. John Fairweather, architect, Glasgow. He is a brother-in-law of Mr. Hamilton Neil, of Glasgow [Licentiate].

Members' Sons fallen.

SULMAN, 2nd Lieut. GEOFFREY, Royal Flying Corps. Accidentally killed on 20th June. Aged 23. Younger son of Mr. John Sulman [F.], of Sydney, N.S.W.

WALKER, Captain L. B., A.P.W.O. Yorks Regiment. Died of wounds received in action 1st July. Only surviving son of Mr. W. S. Walker [F.], of Hull. Mr. Walker's elder son, Captain Denis H. Walker, of the same regiment, died of wounds in January 1916.

WAKERLEY, Captain ARTHUR JOHN, Leicestershire Regiment. Killed while leading an attack near Lens on 8th June. Only son of Mr. Arthur Wakerley [F.], of Leicester.

Captain Wakerley was a Student of the Institute, but deciding to enter the Wesleyan ministry he proceeded to Peterhouse, Cambridge, where he was when war broke out.

Military Honours.

FLOWER, Lieut.-Col. V. A., London Regiment (The Queen's) [Licentiate], has been twice mentioned in dispatches, and in the last Birthday Honours was awarded the D.S.O.

MOORE, Captain FREDERICK WILLIAM, Royal Engineers [A.], has been awarded the Military Cross.

JONES, Lieut. GEORGE HOWARD, Welsh Regiment [A.], awarded the Military Cross in 1915 and recently mentioned in dispatches, has been promoted Captain, Divisional Headquarters Staff.

CLOUTING, Lieut. CHARLES EMMERSON, The Buffs [A.], who received the Military Cross some time ago, has been gazetted Captain and appointed General Staff Officer. Captain Clouting was wounded in the Somme Campaign last September and returned to the Front in February.

Serving with the Forces.

Information has been received that the following are serving, the total to date being 75 Fellows, 523 Associates, 317 Licentiates, and 295 Students:—

FELLOW.

Richardson, Albert Edward: Probationary Equipment Officer, R.F.C.

ASSOCIATES.

Fyfe, J. Simpson: Gunner, R.G.A.

Loveitt, R. A.: R.N.A.S.

Wheeler, Christopher W.: Lieut., A.S.C. Supply Department.

LICENTIATES.

Wells-Bladen, L. M.: Captain, R.F.C.

Wenyon, G. H.: Lieut., Cameronians.

Promotions, Appointments, etc.

Mr. Edgar Wm. Clowes Ovenden [Student], who was in the West Kent Yeomanry, and has served in Egypt, the Dardanelles and Salonica, has been gazetted 2nd Lieut. in the Royal Lancaster Regiment.

Mr. R. G. Roberts [A.] has been promoted to 2nd Lieut., Royal Engineers.

Second Lieut. Wm. W. Houston [A.] has been transferred from the Royal Irish Fusiliers to the Royal Engineers.

Mr. Arthur H. Reid [F.], Hon. Secretary R.I.B.A. for South Africa, who is in the Veterans' Reserve, Cape Town, has had considerable military experience and seen some hard service. Before leaving England in 1877 he had served first in the 2nd Devon Volunteers and afterwards in the London Scottish. At the Cape he joined the Cape Volunteer Artillery and took part in the Gaika Gealeka, Northern Border, and Zulu Wars. In the South African War he served as Lieutenant in the Cape Peninsula Artillery. When the present war broke out he acted on the Cape Town Recruiting Committee, and afterwards joined the Cape Peninsula Citizens' Training Force.

Charing Cross Bridge.

The S.E. & C. Railway Company's Bill for altering and strengthening Charing Cross Railway Bridge came before a Committee of the House of Lords on the 3rd July, opposition to the proposal being offered on behalf of the R.I.B.A. and the London Society.

Mr. Tempest, Chief Engineer to the South-Eastern Railway, informed the Committee that the bridge was a source of anxiety, and its strengthening, at a cost of £167,000, should be carried out as soon as practicable. The Company had abandoned the powers obtained in 1900 for widening the bridge, but not those for the enlargement of Charing Cross Station.

Sir Francis Dent, General Manager of the railway, said if a scheme were put before them for a larger improvement the Company would not raise objection to

it on the ground of having spent the £167,000 for which powers were asked.

Mr. Honoratus Lloyd, K.C., on behalf of the opposition to the Bill, asked that the work should be postponed for a period of two years after the declaration of peace. The petitioners against the Bill were anxious that a fair opportunity should be given for the development of a properly considered and larger scheme providing for the removal of Charing Cross Station to the south side of the river and the construction of a fine road bridge with appropriate approaches. The Railway Company's Bill in its present form would unquestionably prejudice the eventual carrying out of the greater scheme.

Evidence against the Railway Company's proposal was given by Sir Aston Webb, the Earl of Plymouth, Lord Ribblesdale, and Mr. John Burns. Mr. Burns said that when the Channel Tunnel was constructed—and he believed that was now inevitable—the traffic of the South-Eastern Railway would probably be doubled or trebled. Charing Cross Bridge and Station in its present position would then be miserably inadequate.

The Chairman, in announcing the decision of the House of Lords Committee, said they would allow the Bill to proceed upon the Railway Company giving an undertaking that no expenditure in relation to Charing Cross Station as apart from the bridge should be incurred without Parliamentary sanction being obtained.

The Committee further decided that, in the event of any public improvement involving the removal of the existing station and bridge being authorised within a period of fifteen years, the railway company should not be reimbursed for any expenditure they might incur on the strengthening of the bridge.

The Committee also required that the company should not commence construction on the works above water until the expiration of three years from the passing of the Bill, unless the Board of Trade, in the public interest, should require the work to proceed earlier.

From the point of view of all those in favour of the larger scheme advocated by the Institute and the London Society the decision of the House of Lords Committee will be welcomed as affording reasonable opportunity for the authorities to take into consideration the possibilities of the greater scheme, and the additional safeguards now introduced by the Committee should prove of great service.

At the first meeting of the new Council of the Royal Institute on the 9th inst. a cordial vote of thanks was passed to Sir Aston Webb, R.A., for his successful labours in connection with the Charing Cross Bridge Bill.

OBITUARY.

William Henman.—At a recent General Meeting of the Institute reference was made by Mr. E. Guy Dawber, Hon. Secretary, to the death of Mr. Wm. Henman, of Birmingham, and a resolution was passed expressing the

Institute's regret at his decease and condoling with his relatives. Mr. Henman, who resigned his Fellowship in 1913, had had a long and creditable connection with the Institute. He carried off the Institute Silver Medal in 1868 for his drawings of the Church of St. Thomas, Winchester; was awarded the Pugin Studentship in 1871; became an Associate in 1882, and a Fellow in 1895. When President of the Birmingham Architectural Association he represented that body on the Institute Council and took an active interest in its affairs. Articled to his father, Charles Henman, in 1866, he was afterwards assistant in the office of Professor Hayter Lewis, and, later, assisted Edmund Sharpe with his works on Architecture. He started practice at Stockton-on-Tees in 1871 and removed to Birmingham in 1879. Among his early works were the Bromwich Town Hall, Handsworth Public Buildings and Free Library, Stockton Exchange Hall and Club, Aston Public Buildings and Free Library, The Sir William Giltstrap Library, Newark-on-Trent; Public Offices and Church Schools, Middlesbrough; Schools for the following Boards: Ormesby, Norton, Leeds, Aberdare, Llanelly, Wednesbury, Aston, etc. His name was widely known in connection with hospital planning and construction, of which he had made a special study. He was the architect of the New General Hospital, Birmingham; the Royal Victoria Hospital, Belfast; the Guest Hospital, Dudley; remodelling and improvements, Stockton and Thornaby Hospital (jointly with Mr. E. A. Whipham); Hospital, Lansdowne Crescent, Great Malvern; Darlington Hospital extensions (with Mr. G. Gordon Hoskins). He was the architect, with his brother, Mr. Charles Henman, for the Metropolitan Asylums Board, of the Homes for Convalescent Children, East Cliff, Margate; High Wood School, Brentwood, for ophthalmic cases; Defective Children's Home, Elm Grove, Peckham, and Isolation Block, St. Anne's Home. They won the second premium, Hendon Asylum, for the Central London Sick Asylum District Managers, and the third premium, Park Hospital, Hither Green; second premium, Bristol Royal Infirmary extension. Besides his hospital work he had a good general practice. In Birmingham he was the architect of the Nurses' Home; the Central Exchange, on the Christ Church site; Scottish Union and National Insurance Company's Offices, Colmore Road; Midland Hotel, New Street. Other of his buildings are the Newark-on-Trent Public Library; Midland Counties Home for Incurables, Leamington, Victoria Wing (with Mr. Hawley Lloyd); West Bromwich Union Offices (with Mr. Timmins); electric light and power generating station, Handsworth; St. Andrew's Brine Baths, Droitwich, etc. His contributions to the Institute Transactions include the following Papers: "Hospitals" (JOURNAL, 26th April, 1894); "The Construction of Hospitals" (JOURNAL, 6th May, 1897); "Building By-laws and their Administration" (JOURNAL, 24th December, 1898); "Royal Victoria Hospital, Belfast: Its Institution, Design and Equipment" (JOURNAL, 19th December, 1903).

Lieut. James Bennett, R.E., of Saline, Fife, who was killed in action on the 28th November last, had only been elected Associate as recently as December, 1915. He had had a distinguished career as a student. While attending the Glasgow School of Art he was awarded in the Session 1909-10 a bronze medal for general work, in the following year a gold medal for excellence in general work, and also a medal for excellence in architectural design. He won the Alexander Thomson Travelling Studentship, value £50, and this, supplemented by a £25 Bursary from the

Glasgow School of Art, enabled him to travel in Italy and France for six months. On his return he won the R.I.B.A. Silver Medal and £10 10s. for measured drawings of St. Pietro Montorio, Rome. He was for some years in the office of his uncle, ex-Bailie Houston, of Dunfermline, and was afterwards for three years on the staff of Sir John Burnet at his Glasgow office. His commanding officer writes that his loss is keenly felt in the officers' mess. He was a keen worker and quite fearless of danger.

MINUTES.

At the General Meeting (Ordinary), held Monday, 25th June, 1917, at 5.30.—Present: Mr. Ernest Newton, A.R.A., in the Chair; 39 Fellows (including 16 members of the Council), 24 Associates (including 2 members of the Council), 8 Licentiates, 7 Honorary Associates, and numerous visitors—the Minutes of the meeting held 11th June, 1917, were taken as read and signed as correct.

The Hon. Secretary having announced that the following members had fallen in the War:—Lieut. Roland Walter Lines, Canadian Expeditionary Force, *Fellow* elected 1914, and William Arthur Rigg, Public Schools Brigade, *Associate* elected 1909—it was resolved that an expression of the Institute's deepest regret at their loss be entered on the Minutes, and that a message of sympathy and condolence be sent to their relatives.

The President announced that M. Henri Paul Nénot, who was to have been present to receive the Royal Gold Medal, was prevented by illness from attending, and that the French Ambassador in London had deputed M. Adrien Thierry, Secretary of the Embassy, to receive the Medal on M. Nénot's behalf.

The President delivered an Address dealing with the career of M. Nénot, and handed the Medal to M. Thierry for transmission to M. Nénot.

M. Thierry having read to the meeting a letter from M. Nénot, and briefly addressed the meeting on his own behalf, a vote of thanks was passed by acclamation to the French Ambassador for deputing M. Thierry to be present.

Mr. Reginald Blomfield, *Past President*, having referred to the President's approaching retirement and expressed appreciation of the able manner in which he had conducted the Institute's affairs during his Presidency, formally unveiled and presented to the Institute Mr. Newton's portrait, the work of Mr. Arthur Hacker, R.A.

Mr. Paul Waterhouse [F.] also spoke in terms of appreciation of Mr. Newton's services, and the President having responded, the proceedings terminated at 6.30.

Erratum.—Art Committee Attendances (May issue, p. 174): Mr W. A. Webb should have been credited with 3 attendances instead of 0.

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ARCHITECTURE AND CIVILISATION.

Adjourned Discussion at the Sixth Informal Conference (the second on this subject) held at the Royal Institute of British Architects, 18th April 1917.

CHAIRMAN: MR. F. W. TROUP [F.].

THE CHAIRMAN: It is not necessary for me to recapitulate what took place at the first conference, on the 24th of January last. You have already seen a full report of that meeting in the JOURNAL for February. I may just remind you, perhaps, that we had papers from Messrs. Lethaby and Wilson on the subject under discussion—"Architecture and Civilisation." Messrs. Beresford Pite, Richardson and Dunn spoke at some length, and Messrs. Lanchester and Weir each made a few remarks, giving us hopes that they would make further comments at the adjourned meeting fixed for to-day. Of those whose names were given at the first meeting as being willing to take part, two, owing to the adjournment, were not given an opportunity to speak—viz. Messrs. Ricardo and Crompton—and I was in hopes that both might now add their quota to the conference to-day. I shall ask them to speak first, unless Prof. Lethaby, as originator of these Conferences and introducer of this particular subject, cares to make any preliminary remarks.

MR. HALSEY RICARDO [F.]: I would like to follow on *à propos* of certain things that Mr. Weir said which impressed me as really touching the root of things. One of those was that architecture was an index of the feeling of the time, and the other was the importance of education. I think we are liable, every now and then, not to take into account the importance of general feeling, and are inclined to suppose that the great men who periodically appear are pioneers, leaders, and makers of things. Take the revival of Gothic architecture, which was a very great thing of its kind. We are inclined to associate it with the personal work of men like Pugin and Butterfield and Street, forgetting that those men were really the index of a very strong feeling that backed them up. Without that immense popular force behind them, theirs would have been merely sporadic individual efforts and would not have had anything like the effect we know they did have. The same sort of force of public feeling affected the Pre-Raphaelites, and affected the poetry of the time. One talks of Ruskin

and Madox Brown, of Rossetti, Morris, and so on, but what gave them their power was the great feeling that was behind them, which may be interpreted as a protest against the eighteenth-century quietism. What was natural in those days was that the people, dissatisfied with the spirit of their time, should be looking for some jumping-off place, some place from which they might rise to more passionate heights and proceed. The unfortunate thing was that they kept their eyes turned so severely backward that when they got to the platform, or jumping-off place, no one jumped off: it became a question of correctness and of academic knowledge, of archaeology, and things like that. And so we sank back into another form of quietism, that is to say, a certain complacent acceptance of things as they were, a state of mind in which it was supposed that matters would go on well enough, provided they were given sufficient time. I remember, many years ago, talking to Professor Lethaby and saying I thought what would be good for us would be to be shocked out of this feeling of smug contentment, that it was of no use for us to hope that Afghans, or other people of that ilk, would invade us, and therefore the best thing would be to put a revolver in the hand of every lunatic there was in the asylums and turn them into the streets with instructions to fire off the whole of their ammunition at all and sundry. Well, that is the sort of thing that has happened. We are now under a condition of things which will bring about—I was going to say our having a clean slate, though that is not quite what I mean. But as to our future, we all realise that we must hold together, that there must be more communal feeling, there must be less satisfaction with individual things. And so, with this in view, we come to the question of education. And what I would like to see, if it could be done, would be for the Institute to memorialise the Minister of Education, on the ground that he has now got the chance given by a clean slate of seeing that everywhere there shall be a great teaching of the virtue of citizenship. That is what made Athens great, geographically a paltry place with no natural advantages,

and it has remained great in our estimation ever since. The sense of citizenship is what has also made other places famous.

And, besides direct education in citizenship, I would like it also represented to the Minister, as part of the education of a citizen, that one of the characteristics of architecture that can be taught in the schools is that of orderliness, which at present we have rather lost sight of. Of course, there is the danger about insisting upon definite orderliness, seeing that architecture, being a living art, must develop and must progress; and there is a sort of order, charming in its way, which might be described as crystalline order, a final sort of order. Things may be very orderly, like the forming of a crystal, but when once formed there is no progression. On the other hand, there is the orderliness of growth, like that of the growing oak or the beech tree. We have to deal with an art which is vital, one full of life and of growth, an architecture suitable for towns which are full of life and growth and development. But we still want to keep to orderliness, which at present we have not got.

And one way of educating that, I think, would be also by representing to the Minister of Education that the teaching of crafts in the schools would help a great deal in that way: that when you work with your hands you discover the conditions of cleanliness, of accuracy, and of finish; you also discover that there is a kind of finality to good work. You discover that the drudgery of it is pleasant, instead of being unpleasant, as much education is. And there is so much less to unlearn: much which you do is good for all time. And then you have an appreciation of what is not good work, as well.

Another point that I want to put before you has nothing to do with the Minister of Education. I think we do not sufficiently recognise the part that women have played in architecture. I put it in this way. If I remember rightly, Mr. Dunn said that the thing we have done of late most successfully has been our house, particularly our country-house, architecture, especially in regard to the interior arrangements of the house, and I think that is due to the fact that women have insisted on having their say in the matter. It has been very inconvenient and disturbing to our architectural omniscience, but it has produced a result that I think we can pride ourselves upon. And if that kind of co-operation can be extended it will make our streets and towns more decent and orderly.

THE CHAIRMAN: Will you bring that forward as a resolution, Mr. Ricardo?

MR. RICARDO: It might be put in the form of a resolution that the Institute should memorialise the Minister of Education on the lines I have been talking about.

MR. W. E. VERNON CROMPTON [F.] read the following Paper: Many of the points for this Paper were jotted down some time ago and have already been discussed in part at the meeting in January last.

I hope, however, that you may think them of sufficient importance to warrant further emphasis if considered from another aspect.

Professor Lethaby deserves our thanks for bringing before the Institute definitely and with considerable breadth of view a type of subject which has been overlooked by us as a body. We are so bourgeois in outlook, so respectable and correct in attitude, that it is hardly considered the thing to concern ourselves with architecture in relation to the sense of order, economy and fitness and the many other qualities, values and activities which form the basis of civilisation—architecture and political economy, in fact.

Professor Lethaby's Paper was to a considerable extent a discussion of misbehaviour and bad manners. Now it is against this background of bad manners, this disorderly and inept type of life, that architecture is silhouetted, and indeed the whole of the things we have been discussing at these conferences. This is disconcerting in that it makes so difficult architectural education and the other schemes in which we are interested. However admirable may be our schemes of architectural education, however pious the resolutions which we may pass in this room, they will always remain schemes or ideas working in a vacuum unless they coincide fairly with the sense of values of the nation at large.

Ateliers and schools, to be really effective, must reflect the sense of values of the layman and not the reverse. If the former obtain, you have architecture growing naturally out of the life of the times; if the latter, you have a priesthood imposing upon the people a mystery they cannot understand. The late Mr. March Philipps tried his best to get the Englishman to realise in his heart, not merely to assent with his mind, that the architecture of a civilisation was one of the most valid pieces of evidence whereby the spiritual and intellectual attainments of that civilisation could be measured. We are getting exactly the type of architecture we deserve or can understand, a type at once ineffective yet dominant, incoherent yet expressive, virulent yet banal, subservient to prescription and yet anarchic. It is difficult, however, for us to get away from our sentimental middle-class notions that the modern English home, the modern English factory, is a model for all the world. In stark reality the vast majority of English homes and factories, built, say, within the last ten years, are our disgrace.

The relation of civilisation and architecture is one of cause and effect: the intellectual life or civilisation will give the intellectual architecture. The sensuous life will produce the sensuous art, and so on. If the architecture of the present time is anarchic it shows that the civilisation of our time has muddled ideas and an irrational way of thinking. To seek to improve the architecture of this country by improving the education of architects is excellent as far as it goes, but it is a more essential if less obvious duty, not only as citizens but as architects, to put our energies into altering ideas about elementary and public school

education and all those other matters which direct the currents of our civilisation. Only by so regarding things can we avoid the error of putting the cart before the horse.

Although the relation of life and architecture is one of cause and effect, it would be a mistake for us to consider that the condition of architecture in any country at any time is a *primary* effect of life or civilisation: it is merely a *secondary* effect produced by secondary causes. If we are dissatisfied with the condition of architecture and wish to get at the real reason for its lamentable state we must pass over these secondary relations, such as the influence of the competitive contract system, the decline of technique in the crafts, building for the purpose of profiteering and dividends, etc., upon architecture, and get back to those that are primary. This is what I shall try to do.

History shows that civilisations cannot run for long upon an even keel: they are always subject to shocks, but these shocks are not necessarily detrimental—in many cases they may be invigorating unless they are so extreme as to prevent the civilisation adapting itself, in which case dislocation occurs in the organism and the civilisation either breaks down or goes under; is altered or weakened. Has there been such a dislocation to which our civilisation has not been able fully to adapt itself? I believe there has, and in tracing it we shall hope to touch upon the primary cause of which I have spoken. This would be a task of considerable difficulty when we take into account the multitude of causes, currents, factors, reasons—call them what you will—at work in the world: unless we remember that the most powerful cause or set of causes, in fact the root cause of change in our latter-day civilisations, is in its nature economic.

If we wish to have a clear idea as to what is wrong with architecture at its root we must cease to confine our discussions to styles, education, or aesthetics, the disorder of our streets, sound building, etc., for to do so would be merely to consider effects, leaving causes untouched. That which has thrown architecture off its balance is synonymous with that which has dislocated our civilisation.

As architects in search for this economic cause, let us recall to mind the nature of eighteenth-century civilisation. We see there the gradual extinction of an aristocratic class with the power and wealth: having a modicum of scholarship sufficient to keep alive a tradition which it was able to impose upon a people who had for the most part a definite status. Everything was homogeneous and oriented in the same direction: the means of the civilisation—as regards the art of building—were sufficient for the end in view. At the present day there is no aristocracy to speak of, but a plutocracy with no particular scholarship and no particular tradition: a plutocracy unable to impose anything but a stray fashion upon a common people who, in their turn, are mainly wage-earners without status.

It is difficult to find a condensed and general formula to describe the economic cause for this change, a cause behind which it is not necessary, here and now, for us to go; but it may be sufficient to formulate the cause by saying that since the latter half of the eighteenth century man's control over certain physical forces has developed with extreme rapidity and at the expense of his powers in other directions. Hence the want of balance, the dislocation in our civilisation, and the chief reason—speaking in general terms—of the troubles we are discussing. Bergson, in *L'Évolution Créatrice*, touches upon this idea as follows: "Nos habitudes individuelles et même sociales survivent assez longtemps aux circonstances pour lesquelles elles étaient faites, de sorte que les effets profonds d'une invention se font remarquer lorsque nous en avons déjà perdu de vue la nouveauté. Un siècle a passé depuis l'invention de la machine à vapeur, et nous commençons seulement à ressentir la secousse profonde qu'elle nous a donnée. La révolution qu'elle a opérée dans l'industrie n'en a pas moins bouleversé les relations entre les hommes. Des idées nouvelles se lèvent. Des sentiments nouveaux sont en voie d'éclore. . . . Elle servira à définir un âge."

The economic situation arising from man's control over certain physical forces, developing with extreme rapidity and at the expense of his powers in other directions, coming as it did in a relatively sudden manner, resulted in giving great wealth to some and as a consequence poverty to others in directions where there had been no great wealth or abject poverty previously. Wealth accrued to a class of the community to whom the planning of Bath and Bloomsbury made no appeal; in whom the down-at-heel contrivances of modern life produced no jar.

Considered economically, wealth is power over the lives of others; considered also economically, civilisation is a method of distributing wealth. Understanding this will enable us to appreciate that herein lies the factor which brought about the gradual extinction of the aristocratic influence of the eighteenth century—the Bladesover tradition of Wells—that aristocratic tradition which gave us Bowood and Prior Park, a tradition which can never return in spite of the hopes of some. Herein, also, lies the factor which has produced Holborn and the Strand, which has destroyed the craftsman with his status under the aristocrat and has given us the hand under the plutocrat. All this is of vital importance to architecture; but, judging from the amount of attention given to the subject by this Institute, it might not concern us at all. We have the means whereby an income of £50,000 can be accomplished, but we have not the means whereby it can be spent properly. We have the means whereby half a million can be earmarked for building, but we have not the means whereby to avoid sweating our labourers.

I do not overlook the fact that similar conditions have prevailed in civilisations which produced great art. But if the matter be studied in detail, I think

you will find that the difference in degree between these present and past phases is so great as almost to amount to a difference in kind. All civilisations can withstand, and have withstood, the strain arising from unstable conditions up to a point; that point was passed in England early in the nineteenth century. Hence the result! Architects must grasp clearly and without evasion, shuffle or compromise the nature of the economic cause which has produced the primary effect of dislocation which in turn produces the secondary effect upon architecture.

By all means let us hammer at the political administrators and the municipal authorities, but in nine cases out of ten you will find ignorant and unsympathetic ears and eyes, because they are the ears and eyes of those who from their elementary or public school life onwards have not been bred to attach much importance to many of those things which, I trust, we in this room consider as vital to our survival as a great nation. The machinery is there to do a great deal, but not the knowledge or goodwill. The whole lump of things must be leavened, but the day has gone by when the upper portion of the lump can be leavened and the lower portion left.

Half a century of spade-work is ahead of us in a State at present but partly democratised, slow work with meagre results before a foundation can be prepared upon which a civilisation can be raised which will not misbehave itself continually and be open to Professor Lethaby's just indictments. The aristocratic age is gone for good; in the democratic age before us we shall not be able to produce excellent architecture unless the people live an excellent life. It is, therefore, time for this Institute to lay aside its aloofness and to go down into the arena as a propagandist body anxious to ally itself with engineers, master builders and trades unionists, having a lively faith which it should set forth in a tractarian literature thoroughly well written. We have spread ourselves very agreeably over the English Renaissance, the formal garden and suchlike important pleasantries; we should now voice our convictions not only upon the five or six excellent suggestions mentioned by Professor Lethaby, but also upon the relation of the architect and his work to all the vital economic problems by which we are being stifled.

Architecture for some time past appears to have slipped off the true line of the evolution of things, partly because great architecture cannot exist in an irreligious civilisation, but partly because we ourselves have shut our eyes to the reality of things.

I have intentionally been somewhat provocative, and I trust you do not think I have been talking around the point.

Mr. H. V. LANCHESTER [F.]: May it not be suggested that the entire attitude of the architectural profession as represented by the professional societies in relation both to the public and to architects is in need of drastic revision, and that the present moment,

when ideas are in the melting pot, is a suitable time to effect a change in this respect? The claim that this is the moment to forward any proposition for a reorganisation of our professional activities is reinforced by the fact that most of our younger men are in the Forces, and that it is the duty of those who are not to see that on their return to the ranks of the profession every practicable opening is made for them to take up their work again. With this in view it will surely be best that those who have not a definite position to which to return should be placed with special regard to their faculties, present and potential. It is not for us to look at their claims in a narrow spirit. After all, they represent nearly half the effectiveness of our profession during the coming decades. However, this is only one aspect of our problem, and one that, though it looms largely at the moment, is none the less subservient to the main argument in favour of an effort to raise the efficiency of the profession as a whole. Taking first the position of architects towards the public. Our most important duty is to endeavour to ensure that the nation secures the best architecture possible. We are not exonerated from this duty by the fact that the public is incapable of securing this by its own efforts. To commence with, if we as a body took a greater interest in the problems linked up with our special sphere of activity, such as social and educational questions, these sympathies would bring us in return a clearer appreciation of our own work. Again, may it not be possible to offer the public a more easy road by which to obtain a higher standard of design in buildings of all classes? Is it going too far to say that to the artist and inventor a fully occupied life is worth far more than the amassing of surplus wealth which can only be utilised in buying inferior recreation? The appreciation of this fact frees us from the obsession that we need to receive more than a reasonable competence from our efforts, as even then our life is a fuller one than that of those less happily occupied. Once convinced of this, we are at liberty to organise our energies in such a manner as will best lead to fine architecture, and to eliminate factors discouraging this.

Before carrying my argument further, may I demand your acceptance as an axiom the assertion that everyone enjoys best the type of work in which he is most skilful; and the further one, that the field covered by the practice of architecture is so broad that a greater degree of specialisation is admissible? These views have been widely accepted in the United States, where the large offices include men of varied types of qualification. I think it may be claimed that architecture has been the gainer; and, though we may not wish to organise exactly on these lines, it will be well to bear in mind the fact that by this means those whose capacities differ are working much more efficiently than by our individualistic system. It will probably be felt that the genius of our own country is not quite in harmony

with these large organisations, but is it not possible to secure some of the advantages without such a pronounced sacrifice of personal initiative?

The aim I have in mind is that more of our buildings should show the hand of the genuine architect rather than that of one to whom even the achievement of some simulation of the real thing is a laborious effort. We have in our ranks men of highly developed artistic faculties who under our individualistic system devote but a tithe of their time to the exercise of these. We have sound and ingenious planners and constructors who are called upon to go outside their own sphere to an almost equal extent. We have those whose skill lies in the tactful handling of difficulties; those who are specially capable as business organisers in respect to building work; indeed, it is not possible to classify all the shades of ability and temperament.

It would be waste of time to recite the various haphazard expedients now employed as correctives. You can all depict them for yourselves, and are probably fully aware of the extent to which they fail in respect to our avowed aim of securing the best architecture we can conceive of as possible. We can see the reasons why they fail, and know that not the least of these is the limited outlook we ourselves have taken in regard to our practice of our profession. Is it not time, amid the general revision of ideals, to consider whether we cannot broaden this outlook and discover a means of reorganising architectural work on lines conducive to better architecture and increased general efficiency? Whatever we may be able to do for the future by improved methods of education and other measures, the fact remains that the profession offers employment for more than the number we can hope to find gifted with the faculty of architectural expression, and the problem will remain of getting the best possible output from the limited number so gifted. The French Government attempts this by the preferential treatment it accords to the selected class of architects "diplômés," but we are hardly likely to get much immediate help from our own Government, already overburdened with more general problems. Our clients, the public, are not in a position to appreciate the difficulties. If anything is to be done we must do it for ourselves—but how? That is the question before us.

Now, assuming that we have the best will in the world with regard to co-operating with our professional brethren, it is not easy to see how such co-operation is to be effective, even with the most altruistic intentions, except by means of a professional society. Such a society must do more, in two ways at least, than has been customary hitherto. First, it must find a way to secure closer personal contact between all its members; secondly, it must see that special qualities exhibited by any of its members receive adequate recognition and opportunity. Take our own Institute. I think it is quite wrong that any member should be allowed to ignore its existence

from the day he joins to that on which he dies or retires. There are so many things that we might do, but don't, that everyone ought to take a share in the work appropriate to the stages of his career. From the moment of entry as a student there should be someone at hand from whom advice and help may be sought; and such relationships should continue. I will not weary you with details of method, as one need merely point to the fighting services as offering a hint as to how members of a corporate body may be grouped and kept in touch with each other. This, effectively done, facilitates the second requirement—namely, that merit should be promptly recognised and rewarded. It would be much easier to influence public bodies, and even other prospective employers of architects, if the Institute were recognised as devoting its chief interest to the advancement of the standard of architectural achievement without suspicion of professional bias or aggrandisement. We have already gone some way in justifying this claim, though but a short distance compared with that to be covered if we are to earn the confidence of the public that when it places itself in our hands as an adviser we as a body will act unreservedly in the interests of the community in respect to architecture, and will treat our own members as an organisation to be utilised, in groups or individually, in exactly the way by which the public interest will best be served, and in no other.

There are societies in existence which have been formed to do the work that we should be doing. The London Society, the National Housing Society, the Garden Cities Association, are all doing work that it is the proper function of this Institute to do. We have ignored it, and other people have taken it up. The consequence is that they are in touch with the vital forces in the country, while we seem to be sitting in the clouds.

We know that there is no recreation that bears comparison with the exercise of our own craft. By this closer contact it will be more easy for us to take up our work in the most efficient way. We need not all be shut off in our individual cubicles, to try and struggle through the work as best we can. When we know that another man can do a certain part of our work better than we can ourselves, we should frankly admit him into our band, with the single object in mind that we are giving the best we can to the public, who, after all, are the people to be considered. If we see that a man has made particularly good progress in a certain direction, he should have better opportunities afforded him than he gets at present of "making good." Take the case of the man who has won his spurs by studying design: he is often in a worse position than the man is who has made no effort at all in this direction. I should like to see the public able to place themselves in our hands as their advisers with regard to architecture and the questions that are linked up with it. A resolution has been drafted on the lines of Mr. Lethaby's opening which I will read:

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MR. LANCHESTER: I should like, as an object-lesson, to point to the miserably attenuated list of Honorary Members of this Institute: it is so very atrophied, compared with what it ought to be.

THE CHAIRMAN: This is Mr. Ricardo's resolution: "That the Institute should represent to the Minister of Education the importance of insisting, in all the universities and schools under his charge, on education in the duties of citizenship in relation to the amenities of our towns and cities, and the value of manual instruction in mental development."

MR. WEIR: I will second that with pleasure.

MR. JEMMETT: Would it be worth while to deal with that subject as a whole, that is to say, the improvement we want in the general education of the country? A resolution might be drawn up embodying other points also, besides those raised by Mr. Ricardo and Mr. Fletcher. There is Mr. Fletcher's very interesting point about the training of the eye. If we put all those resolutions down, and put them on one side for a discussion, thinking them over meanwhile, we may get a general resolution dealing with the whole question of the education of the layman, as it were, from our point of view.

MR. LANCHESTER: The next Conference will be on Education.

PROFESSOR LETHABY: We could then explain it and expand it.

MR. WEIR: That is a wider resolution. The next Conference is on the education of the architect—a more limited subject than is set out in this resolution, which speaks of the education of the citizen.

PROFESSOR LETHABY: I think we should take this now.

MR. JEMMETT: It has been pointed out that we cannot get good architecture unless we have good civilisation. Many of us have been feeling it for years. The first requirement is that the people shall live a decent sort of life, and have decent civilisation, then we can have decent architecture. We are pointing out defects in civilisation, and in the education which produces bad civilisation. And, in my mind, there is associated with it the question how to educate the ordinary citizen now to produce a decent, well-ordered civilisation, so that we, in our turn, can get well-ordered architecture. I thought if you were going to deal with the education of the layman at all, you might deal with it in a wider way.

MR. LANCHESTER: Could there not be a preamble to that resolution?

MR. JEMMETT: I think other points might be brought up, and the whole welded into one resolution dealing with the education of the public. The point which occurred to me is, that the public is not educated, it is only educated mentally: its emotions are not educated, the very feeling of a man is not developed; there is no culture in the country, broadly speaking. That is a point which might well be brought before the Minister of Education if we agree

to approach him. That is how I think of it. By degrees, after two or three meetings, we might get a whole list of subjects.

MR. WEIR: Probably that would happen in any case. This proposal is to ask the Institute to draw up something regarding education. This resolution will not go to the Minister as it stands: it will go to the Council of the Institute, and they might draw up a proper comprehensive resolution, to be sent to the Minister of Education.

MR. JEMMETT: I do not wish to oppose anything that has been done, but I thought the scope of the resolution might be enlarged before being sent.

THE CHAIRMAN: We sympathise and agree with Mr. Jemmett's views, but there is danger of the matter being postponed indefinitely unless we are careful. There is no reason why this resolution should not go as it is now, and that we should still continue as Mr. Jemmett suggests. We have two resolutions before the meeting, and I understand that Mr. Lanchester will propose a third.

MR. LANCHESTER: My other resolution is: "that the Council of the R.I.B.A. should consider the possibility of developing its organisation on lines tending to bring its members into closer touch with each other."

PROFESSOR ARCHIBALD C. DICKIE [A.]: I should like to say a word on a matter of detail, as to the question of education in so far as it affects the particular school I have experience of, that is to say, in so far as the attitude of the Institute might be improved or altered in order to improve the education of the schools in general.

PROFESSOR LETHABY: That would come in admirably at the next meeting when we are again to discuss the subject of the education of the architect.

THE CHAIRMAN: Will anyone second Mr. Lanchester's third resolution?

MR. CROMPTON: I will second it. And there are two matters of detail and one of principle that I would like to mention. The first of the matters of detail is, that one of the resolutions mentions "public architecture." I do not know what that means. The second point of detail is in reference to education in civic responsibility. I think the Minister of Education might overlook the whole of the point mentioned in Mr. Lethaby's Paper unless it is pressed. The matter of principle I wanted to refer to is, with reference to the developing of the organisation of the R.I.B.A. This is an internal matter only, as I understand, among ourselves. Personally, I should like the question of the development of the organisation to extend. I feel strongly that the whole of the building in this country is on an illogical basis, because the engineers and ourselves are in water-tight compartments. If the development of the organisation could extend so that a working scheme could be arranged between engineers and ourselves, I think that would be a tremendous step forward.

MR. LANCHESTER: I had no idea of excluding other aspects: I put this in as one of the things which I thought were definitely needed.

MR. CROMPTON: Will you add that point of mine to the resolution?

MR. LANCHESTER: Certainly, if we can put them together; I think we should be in touch with all activities.

THE CHAIRMAN: All there is in this resolution at present is "with each other."

MR. LANCHESTER: I am willing to extend that. And if we are to extend it, why not extend it to all other activities? The term "professional bodies" would exclude those having propagandist activities, with which we ought to be in closer touch.

MR. CROMPTON: The art of building construction in this country is on an illogical basis, because engineers are not linked up with ourselves. To use the term "professional bodies" would bring in the medical and other professions which are not kindred: it is an organisation to include all the kindred building activities that is required.

SIR JOHN BURNET, R.S.A., LL.D.: I think it is right, and profound common sense, that we should link ourselves up with any societies—trade or professional—connected with "building construction" in the widest interpretation of that term. We take a very grave responsibility in proposing to give so many professional men, so many craftsmen, and brother artists, work to do, which, when completed, should result in fit and beautiful structures; and that responsibility needs to be backed up by friendly association with those men whom we ask to place themselves under the influence of our designs, the artistic merits of which depend so much on our intelligent appreciation of, and sympathy with, their work and ideals. Ours cannot be a rule "by order" and "specification" alone, but by sympathy and by understanding. Therefore I think if by any language you can alter Mr. Lanchester's motion to include them—Societies, Crafts, or whatever they may call themselves—it will be one of the strongest motions on the subject yet brought before the Institute.

MR. CROMPTON: The people whom we should be linked up with are the engineers.

SIR JOHN BURNET: It is our duty to draft contracts with "engineers" and with "masons," "plumbers," and "joiners," etc., all of which crafts are becoming increasingly scientific; we cannot possibly be "masons," "plumbers," and the rest of it, and therefore the closer we keep in touch with them—and surely we can do so as an Institute without ceasing to be professional men—the better. Would it not serve our purpose if you were to add to that resolution simply a reference to engineers and the building and artistic crafts?

MR. CROMPTON: It is the civil engineers I had in mind.

SIR JOHN BURNET: Yes.

MR. LANCHESTER: I am in agreement with what Sir John Burnet says, but I want to go further. I think we should be doing wrong to exclude various societies interested in social work and social amelioration. That is the type of society I want this resolution to cover.

THE CHAIRMAN: But you do not include it.

MR. LANCHESTER: I agree to expand it, in the direction indicated by Sir John Burnet and Mr. Crompton, and even then we should not be including people and organisations connected with civilisation and social amelioration.

SIR JOHN BURNET: Like the London Society and others?

MR. LANCHESTER: Those dealing with housing and social conditions.

SIR JOHN BURNET: I have not, so far, disturbed the meeting because I was deeply interested in the thoughts which have been expressed. I feel that Professor Lethaby has led us into an extremely wide field. We are speaking not only as architects, but as individual citizens, and I think sometimes we have to distinguish in this room very clearly, between what is our duty as citizens and our more specific duty as architects. The first thing that bothers me right away in proposals to advise this or that person, or public body, is, "how about ourselves?" Is our education sufficiently perfect? Is the practitioner of architecture sufficiently strong in meeting his duties to really back up this attitude? Remember we are professional men, and as such we do not propose to give advice except on that on which we are well informed and have had experience. Ought the Institute to tender advice on matters not strictly professional, to a public body, with its education scheme in the position it occupies at present, and while we are having meetings with the object of improving it? My feeling would be to determine to put "our own house" in order first, we can then fearlessly stand on our feet, both as citizens and as architects.

I do not want to throw cold water on anybody's scheme. I feel very enthusiastic about what I have heard here this afternoon, but for my own part I feel very strongly that in quietly and efficiently doing our own work we have already a tremendously wide field of influence and one in which, as architects, we are essential.

Take the matter of craftsmen. One of the things that have been troubling me for some years now is the system of tendering and its direct effect upon our educational institutions. For Government or Municipal work tenders are often taken from Tom, Dick, or Harry, and this even for very fine work. The architect in his private practice does not so act. I suppose he generally sends a list of proposed tenderers, all of whom he knows to be suitable for the type of work required, to his client, asking him if he desires to add any names to the list. In the case of public work, if

the same routine is followed, often names are added without thought of efficiency, and the architect, on inquiry about such firms, and after examination of work done by them, may have reason to believe that some of them could not do the quality of work required, and is obliged so to report. Nevertheless in some cases such firms are asked to tender, with the result that, even if they are not accepted, a false idea of the fair price of sound work is given. The firms put on the original work were probably good men, having for years a reputation for high-class work, executed in a well-organised shop, by craftsmen for long in their employment, and such a firm is asked to compete in a matter of price against a firm guided, perhaps, by a capitalist, but one who had no knowledge of, or practice in, the high-class work required, who was simply "out for profits."

If that is to remain the condition of things, how are such good firms to continue to exist? And if they do not exist who will employ the product of the technical college—he is of little use to the other type of firm whose wage is generally low, and whose men are constantly changing.

We are all hoping that the technical college is doing something, but I think Prof. Lethaby strongly believes—certainly I do myself—that the unalloyed technical college will not do. There must be "good shops" in which men may find employment, giving them some return for expenditure on their education, and a fair guarantee of continuous employment. In other words, a "market" appreciative of the product seems to me the greatest incentive to the success of our technical institutions, and it cannot be expected from the general public till after many years of experience of its real economy; but it may, and should be expected from the Government of the country and its Municipal Authorities, that spend public money in public buildings and in the support of these institutions.

One of the first things I would like us here to do is to put this matter very clearly before the Minister of Education and endeavour to gain his support before approaching any other Government Department. Whatever the individual citizen may do, he must suffer from his own recklessness and want of knowledge if he likes to ask Tom, Dick, or Harry to tender for his work; but is the Government or the Municipality entitled to spend rates and public money on work done in any other way than the best? With the knowledge that what the country requires is highly efficient workmen, they are the source of wealth and more necessary to it than the accumulation of wealth obtained, if it be obtained, by a false economy destructive of the highest traditions of British workmanship. If we could have a list of contractors at this Institute, a signed list, each architect certifying that the work entrusted to each firm had been well and efficiently carried out, would not the existence of such a list stimulate the contractors to earn the approval of the architect in every way they could, so that

they would merit a place upon it? With that habit carried out for two or three years we might confidently approach any Government Department and say, "We have done this, we have got splendid work which has been appreciated by the architects and those most fitted to judge; it is open to you to see; and we want you now in the interests of the country to restrict tendering for public and municipal buildings to firms of the type on our list. This list is not complete; it will be added to from time to time, but only by merit in quality of material and workmanship, never by mere size or importance of contract."

MR. LANCHESTER: This is my amended resolution: "That the Council of the R.I.B.A. consider the possibility of developing its organisation on lines tending to bring its members into closer touch with each other, and with all technical associations and those engaged on a constructive social policy"—it is these last words that I want to bring in—and so on. The reason for including those bodies engaged on a constructive social policy is that several of us have been actively in contact with them. We do not pretend to arrogate to ourselves the position of directors of social policy, but we have certainly learned much, and been able on some occasions to give sound and useful advice on such questions. Therefore it seems to me that as we are asking the Institute to develop its organisation and to get into closer touch with other societies, it is possible that members of the Institute would wish to extend their activities to social organisations. I think there would be benefit in both directions if we were more in touch with those bodies. I do not think that will cut across anything that Sir John Burnet said.

SIR JOHN BURNET: No.

PROFESSOR LETHABY: There are certain words that we are not supposed to use here, and there are certain words that we may use. If you were to say, in the resolution, "constructive policy," it would be much the same, and it would avoid the use of words which would not be in keeping. We are not supposed to use the words "social," or "democracy." If you did you would set up the backs of a large contingent of the Council at once.

MR. LANCHESTER: When you talk about architecture and civilisation, surely social policy is at the very root of the argument. I would rather stand the racket of being shot at for bringing in the word "social" than leave it out. If a better word can be found to carry my meaning, I shall be pleased to substitute it.

MR. CROMPTON: These are the words which matter, and the sooner we use them the better.

PROFESSOR LETHABY: Somebody might say, "At last, socialism."

MR. FLETCHER: I second the proposition.

THE CHAIRMAN: There are now three resolutions.

MR. JOHN CASH [F.]: I am delighted with all that has been said. I am something of a politician

myself and particularly anxious about social affairs, and I happen to be a member of an education committee. What I feel is, that architects are not in touch with the public, and they certainly are not in touch with the Press as they ought to be. You hardly ever see architecture mentioned in the ordinary everyday Press, the daily or the weekly journals. Can we get into touch with the public in that direction? Can we ask the Minister of Education to put architecture forward as a study for the scholars even in the elementary schools? The history of architecture is almost as exciting as the history of fighting, of battleships and things of that kind. It might be made very interesting if the Institute would take upon itself to suggest subjects for reading-books. Perhaps some of our members could become authors. Professor Lethaby, for instance, would be an admirable author of juvenile literature dealing with the subject. We might help the Minister of Education in that way, and he, in turn, might help us. There will be no outlook for architecture in England until we have made democracy interested in it as a subject. It has been well said to-day that times have changed, and the eighteenth-century manner of government has gone, and that we are now approaching something like democracy. The people are to be our future masters, and we have to get their ear. And the only way to do that is through the elementary schools and through the public Press. I feel we ought to do a great deal of good by continuing along the lines which have been started at these conferences: there will be very little done unless something of the sort is undertaken.

THE CHAIRMAN: May I take it that it is agreed that the first resolution be sent to the Council of the Institute? Mr. Crompton has questioned the phrase "public architecture" which occurs therein, and I think the term is liable to be misinterpreted: we take an interest in all architecture.

SIR JOHN BURNET: We could say "civil and public architecture."

The resolution thus amended was put, and carried *nem. con.*

THE CHAIRMAN: The second resolution reads: "That the Institute should represent to the Minister of Education the importance of insisting, in all the universities and schools under his charge, on education in the duties of citizenship, also the value of manual work as a moral as well as an intellectual education."

MR. FLETCHER: Is not "the duties of citizenship" a little too wide?

PROFESSOR LETHABY: If Mr. Ricardo would substitute "the amenities of civilisation" it would seem more congruous with architects. Leave out the word "moral." I am profoundly in sympathy with them all, but I am thinking of the reception they may meet with at the Council.

MR. CASH: Some more appropriate words are required that do not include art, morality, politics,

and everything. The resolution now includes everything related to civic government. We should treat the duties of citizenship in regard to orderliness and the beauties of environment.

MR. FLETCHER: We want some reference to the relationship of citizens to citizenship, and the relationship of citizens to cities.

SIR JOHN BURNET: I suggest "the duties of citizenship in relation to the amenities of our towns and cities, and the value of manual instruction in mental development." We are, *par excellence*, judges of that because we see it among our men.

The resolution, in these terms, having been agreed to, the third resolution was also put to the meeting and carried.*

THE CHAIRMAN: Our Conference on this subject is now brought to a close, and the result is three resolutions to lay before the Council.

PROFESSOR LETHABY: A point I should like to mention is the general breakdown of our old corporations of mayors and common council as means of getting things done. Our sheriffs and aldermen are good and worthy people, but we have not much reverence in our hearts for them. Why not? Can we go on, do you think, with this amused despair at our institutions? Some method will have to be found for bringing new life and knowledge into all our towns, and I should like to see something like the Oberburgomeister introduced into England.

MR. JEMMETT: Will it be worth while to propose another conference and adjourn this to it?

MR. LANCHESTER: If any member has a subject that he wishes to bring up and ventilate, I hope he will bring it forward so that a conference may be held upon it if thought desirable. A conference can be arranged on any subject affecting our professional activities. We are all hoping the matters brought forward in recent conferences will not peter out, because there is much to be considered, and much on which we want advice from those who have ideas.

PROFESSOR LETHABY: There is the point mentioned by Sir John Burnet, the status of contracting firms. That is very important, I think.

MR. LANCHESTER: A man not a member of the profession said to me recently: "You architects are doing very little for your partners in the profession of building. You don't care how the men live who carry out your work." I think that might be a very good subject: to see if we can get out a programme that will enable us to do more.

MR. SIDNEY GREENSLADE [A.]: It is sad, when you get a clever foreman mason, plumber, fixer, and so on, that they are allowed to drift away from the building on which they have been engaged without a word of thanks. In days gone by, I believe, they were given a dinner, and the clerk of works had a present from the foreman. I have seen men who have been

* The three resolutions as sent up to the Council are appended to this Report.

engaged on a building for five years simply allowed to drift away afterwards without a word of thanks. It seems a most distressing thing.

The following is the text of the resolutions as submitted to the Council:

Resolution No. 1.—The Conference wishes to suggest to the Council of the R.I.B.A. that the time has come when matters of public architecture should be their main concern, especially at the evening meetings and in education. It is desirable that a constructive policy for bettering all our towns be considered, as well as national housing and such questions. In promoting a policy of public usefulness the Institute might best find the way to its own proper development and status.

Resolution No. 2.—That the Institute should represent to the Minister of Education the importance of insisting, in all the universities and schools under his charge, on education in the duties of citizenship in relation to the amenities of our towns and cities, and the value of manual instruction in mental development.

Resolution No. 3.—That the Council of the R.I.B.A. should consider the possibility of developing its organisation on lines tending to bring members of the Institute into closer touch with each other and with all technical associations and those engaged on a constructive public policy.

Of these three resolutions the first was based on the Paper contributed by Professor Lethaby, the second on Mr. Halsey Ricardo's remarks, and the third on Mr. Lanchester's; and the Council appointed these three gentlemen as a sub-committee to draw up a memorial to be sent to the Minister of Education, as suggested in Resolution No. 2. The draft memorial was submitted to the Council and, after slight amendment, was passed in the following form and sent to the President of the Board of Education:

MEMORIAL.

To the President of the Board of Education,—

The Royal Institute of British Architects as a body examining candidates for admission to membership holds Intermediate and Final Examinations and admits students to the examinations who have qualified in various ways. This preliminary qualification is of the broadest possible character, but it is felt from experience gained in these examinations that the type of general education leading up to architecture and other related callings might be very greatly improved, if it is to develop on the best lines the mental outlook demanded by all those who may be engaged in the building industries. Moreover, apart from this particular aspect, there is the wider question of the national attitude towards corporate life and the demands of civilisation. In these respects the provisions we would ask for in education would be of no less value generally than as preparatory to the exercise of the large group of callings having to do with building.

The Royal Institute of British Architects, with these objects in view, welcomes—as of the highest importance—the policy of the Board of Education (as defined in the Code of Regulations, 1912) to encourage the natural activities of eye and hand by instruction in the

public and other elementary and secondary schools. It desires to emphasise the recognition that provision should be made for:

1. Training in the perception of the forms of things and in the principles of structure (natural and devised).

Drawing is not merely a matter of skill or of expression, but also a valuable means of observation during the exercise.

All must be taught to draw, and in doing so should practise on decorative and constructive subjects, fine lettering, typical forms of foliage, beasts, etc. Of late years there has been a tendency to get rid of "copies" under the idea that drawing was mainly an exercise to acquire skill in making portraits of objects in the round.

2. Practical manual work, which is of great importance for the development of all (and in many cases almost the only opening to) understanding. This form of education not only offers the pleasure of definite achievement but enables the worker to appreciate the value of good work in general. It is also beneficial in providing a form of exercise, mental and physical, in which the pupil can detect his own errors.

3. Teaching leading to a comprehension of common duties in relation to cleanliness and order in house and school, the streets, gardens, etc.

4. Some knowledge of the history, buildings, and general arrangement of the town and neighbourhood in which the children live, and of memorable citizens; a town spirit being probably the best basis on which to build up a national spirit.

5. Some exercises in the arrangement of simple material which might bring out the idea of design and strengthen initiative.

HENRY T. HARE, *President.*

H. V. LANCHESTER, } *Members of*
ARTHUR KEEN, } *Council.*

E. GUY DAWBER, *Hon. Secretary.*

A letter from the Board of Education dated the 6th July, acknowledging the receipt of the memorial, states that the views of the Royal Institute of British Architects will receive the careful consideration of the President of the Board.

Research in Building Science.

Cambridge, August 1917.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Cambridge University is wishing, in connection with its Architectural School, to promote research in building science. May I call the attention of advanced students to what is being arranged to equip research and experiment in (1) the materials, (2) the processes, (3) the administrations of building?

I shall be pleased to give information to anyone who may wish to treat such questions experimentally in the interests of British art and science.—Yours, etc.,

EDWARD S. PRIOR [F.].

CONTROL OF STREET ARCHITECTURE.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I have read with much interest in the June number of the JOURNAL the report of the discussion on "The Control of Street Architecture." Although there appears to be some little difference of opinion as to the extent to which street architecture should be controlled, I gather the Council is being asked to take the matter up, with a view, presumably, to obtaining some statutory enactment on the subject.

The principle in question—the control of the elevations of buildings on land which may be freehold—has hardly yet been put before the public in such a manner as to secure immediate acceptance. On this account, and also because we architects are ourselves undecided as to the main lines even of any general scheme of control, it will be well not to attempt too much in the first instance. It will be agreed probably that it will be sufficient for the time to deal with London. A certain knowledge of the working of the administrative machine as affecting London streets and buildings induces me, now that the question of architectural control seems likely to be taken up, to put forward the outlines of a scheme. It is, admittedly, of a limited nature, but I believe that anything more elaborate is unlikely, for the moment, to meet with general assent.

I suggest the following as the "heads" of a statutory enactment affecting the control of London street architecture:—

That the enactment shall contain a scheduled list of streets and squares of importance, or of existing architectural interest, in the County of London;

That any person desiring to erect, re-erect, or alter the elevation of a building in a scheduled street or square must make application, with drawings, to the London County Council for its approval;

That the County Council, before dealing with any such application, shall obtain the views of the local Borough Council;

That in the event of the application being refused by the County Council the applicant shall have the right to appeal to the Tribunal of Appeal;

That in the event of the application being approved drawings shall be sent to the Borough Council, the R.I.B.A., and the London Society, any one of which bodies shall have the right to appeal, within a set limit of time, to the Tribunal of Appeal, to have the approval rescinded;

That the Tribunal of Appeal, at present consisting of three members, one nominated by the R.I.B.A., one by the Surveyors' Institution, and one by the Government, shall be increased, when dealing with appeals regarding street architecture, to five members, the two additional members being nominated by the Royal Academy and the London Society respectively.

Some persons will doubtless criticise the proposal that the controlling authority shall be the London County Council. But this body is the duly constituted authority for regulating the municipal life of

London, and it is certain that any proposal to appoint another authority for the control of street architecture would meet with strong opposition. Given that there is the right of appeal in either instance—refusal or consent—and that the Tribunal of Appeal is strengthened by two additional members as proposed, the advantages of having the County Council as the controlling authority appear far to outweigh any objections.

As things are now, it is possible for any London street or square of architectural interest to be spoilt by the erection of a building in vulgar taste, or by one, in itself passable, specially designed to clash with its surroundings. This latter risk is an increasing one owing to the discovery by business men that architecture can so advantageously be made the slave of advertisement.

The proposals that I have outlined would involve no separate Act of Parliament, but could be embodied in one of the L.C.C. General Powers Acts that were an annual occurrence in pre-war days, and may be expected to be so again on the resumption of peace. After a few years' experience of the scheme proposed, it might be possible to prepare a workable solution of the much more difficult question of a wider and more co-ordinated control of street architecture.

HORACE CUBITT [A.].

REVIEWS.

BENCH ENDS.

Bench Ends in English Churches. By J. Charles Cox, LL.D., F.S.A. 8vo. London, 1916. 7s. 6d. net. [H. Milford, Oxford University Press.]

Although the title is confined to bench-ends, the book itself includes enclosed pews and galleries, and, as we might expect from such a skilled ecclesiologist as Dr. Cox, it is an eminently readable and instructive work. It is the latest addition to the series of "Art in the Church," volumes of which Mr. Francis Bond is the General Editor.

The book is divided into two parts. The first part contains four short chapters dealing with the history and uses of benches, pews and galleries; the second, and larger portion, enumerates a large number of examples.

The earliest seats for congregational use in churches were probably stone benches along the walls inside, and round the piers of the arcades, a fair number of which have survived restorations. It appears likely that these benches were provided for the use of the aged and infirm, the general congregation standing or kneeling according to the early custom.

As early as the thirteenth century wooden seats were provided for the congregation, and even in those days the practice obtained of persons claiming private ownership of seats. In 1287, at a synod held at Exeter, an ordinance was made to check this abuse. Not many thirteenth-century seats have come down

to us, but a few may be found, as at Clapton-in-Gordano, Somerset, and at Gaddesby, Leicestershire. In churchwardens' accounts of the fifteenth century are various references to pews for congregational use; in the accounts of St. Peter Cheap, of 1447, there is an entry as to the "mending of a pew next the church door." The ends of the benches were often plain, especially in the earlier examples; a very large number, however, were richly panelled and carved. The bench-ends often have their tops terminating in finials, or as they are called, poppy-heads. This term has nothing to do with the poppy flower, but is derived from an old French word for the figure-head of a vessel. In a thirteenth-century MS. these finials are called *poupées*.

The separation of the sexes during worship goes back to the earliest Christian times, and in England the sexes were strictly separated in our old churches; many items in old churchwardens' accounts show this. In some churches certain pews are set apart for particular uses. We find mention made of the "shryvynge pew," which was probably a seat for those waiting to make their confession; the "chylde wyffes" or churching pew, and also, in some cases, separate pews for matrons and maidens. This last arrangement must have had its advantages from the youthful point of view. At Chester-le-Street, in 1612, the churchwardens added still another special seat: "The churchwardens meeting for seeking for workmen to mak a seete in a convenient place for brydgrumes, brydes and sike wyves to sit in."

The custom of having doors to pews, with locks on them, was in use during the fifteenth century. In 1467, at St. Michael's, Cornhill, the churchwardens "payd to a smith for mayking of a lok to Maister Stokkens pew—vijj." This naturally led to occupiers of pews putting their initials on the pews. Pews thus became private property, and were bought and sold. The custom of renting seats for exclusive use still continues, and will probably remain in use as a most convenient method of raising funds in unendowed churches.

Dr. Cox devotes a chapter to manorial pews, which he considers, with some probability, owe their origin to the use of chantry enclosures which were turned into pews after the chantries were abolished. Many of these pews were canopied and sumptuously furnished, and even, as at Rycoote, Oxfordshire, of two storeys. Dr. Cox wrathfully comments on an eighteenth-century pew at Croft, North Riding, Yorks, which struck him "as the most ghastly and almost profane pew in the kingdom."

The short chapter on galleries is from the pen of Mr. Francis Bond, and may be taken as supplemental to the chapter on Galleries in his *Screens and Galleries* of the same series, published in 1908. There it was chiefly written from the musical point of view; in the volume before us the subject is treated historically. Galleries appear to have existed beneath western towers of some churches before the Reformation, but

the seventeenth and eighteenth centuries were the great gallery-building period. Many good examples of seventeenth-century western galleries still remain, numbers of them highly enriched.

Part II., which includes about three-fourths of the volume, consists of alphabetical lists of seats and bench-ends, many of them illustrated, in 39 English counties, and also a number from Wales. The appearance of such a list is apt to repel a reader at first sight, but bench-ends do not readily lend themselves to being grouped in types or even periods of construction. These lists, however, will be found most instructive and interesting, as descriptions and illustrations are supplied whenever the subject is found worthy of it. They form the largest collection of good examples ever brought together, although no doubt readers can supplement them by many others not referred to.

The book contains 164 excellent photographic illustrations, the examples given having been carefully and judiciously selected of all types and periods. The work is fully indexed, and a useful bibliography is appended for the use of those who wish to pursue the subject further. It is a notable addition to our knowledge of Church Art.

A. WHITFORD ANDERSON [A.]

A HISTORY OF ORNAMENT.

A History of Ornament Ancient and Medieval. By A. D. F. Hamlin, A.M., Professor of the History of Architecture in Columbia University. 8°. New York and London, 1917. 15s. net. [B. T. Batsford, Ltd., 94, High Holborn.]

The acknowledged superiority of American architecture continues to manifest itself in their professional literature, thanks to an ever-increasing national tradition and progressive publishers. Works of outstanding merit are produced in a continuous stream worthy of our very careful study, and emphasise only too cruelly our own shortcomings. The success of the Album type of architectural book, to which recently the English publishers have pinned their faith, with its minimum of letterpress, its ease of production, its elimination of any necessity for critical writing, has swept away the chances for fine literature, and turned the publisher into an agent for photographs selected with a view to catching as many divergent ideals as possible. Now that this field is threadbare—the impossibility of continually finding new material and the discovery perhaps that it is bad business to purchase a book for the sake of a very few inspirations have reduced the purchasers to that section of the dilettanti public which is outside the profession—our publishers are turning to a country where logical expression and critical writing are understood and appreciated, and are glad to constitute themselves agents for what they have long despised.

Be that as it may, we welcome these American books with their untrammelled outlook and freedom from convention. Generally works on ornament have a cut at the designer and draughtsman as well as the

architect; but in this instance the architect receives primary consideration.

The ornament illustrated is largely sculptural, and little coloured decoration is included. One may criticise the omission of adequate coloured plates and the lack of "touch" in the draughtsmanship of many of the illustrations (for which the author apologises), also perhaps their selection with a view to showing "evolution" of ornament is not conducive to always showing the best examples, and a certain sacrifice has been made for the sake of more clearly illustrating the various points.

Previous works on ornament have largely of necessity consisted of collections of examples with scanty descriptive matter; the work under review rectifies a defect in this respect, and can be used in a complementary sense with Meyer's "Handbook" or "Racinet," "Owen Jones," &c. This first volume deals with the ancient mediæval styles only, and is to be followed by a second volume dealing with the Renaissance and modern styles. Whilst not propounding any new theories, it is a book to read and digest. It contains a *résumé* of all the usual accepted facts on evolution collected and expressed in simple terms. The ground covered is so vast that, although several of the parts are of a rather sketchy character, the volume reaches inspiring dimensions, and has 400 illustrations. It is a book to be sincerely recommended to the student who needs an insight into the structural skeleton of ornament.

ROBERT ATKINSON [F.].

OLD-TIME HOMESTEADS.

The Old Cottages of Snowdonia. By Harold Hughes and Herbert L. North. [Jarvis & Foster, publishers, Bangor.]

The production of this little book has evidently been a labour of love to the authors. The traditional methods of building and the development of these modest homesteads, most of which are now, unfortunately, in the last stages of decay, have been studied with a care and insight which have resulted in the production of a work which will commend itself to all who are interested in the question of the housing of our rural population, whether from an historical, an artistic or a practical point of view.

Is it unreasonable to express the hope that, in the newly acquired zeal in official circles for the preservation of our historic monuments, these humble evidences of the appreciative sense of our forefathers for the fitness and harmony of their buildings in relation to their surroundings will not escape notice? In these days of pressed brick, blue-slatted eyesores, dear to the heart of the speculative builder and others who might be credited with better taste, we cannot afford to lose a single example of the buildings, however lowly, which have been handed down to us from the days when resources were often limited and local tradition had not been destroyed by cheap transport.

The earliest actual examples of work of the cottage type, in the district under review, that have survived are ascribed by the authors to the latter part of the fourteenth or the early part of the fifteenth century, and the development in plan, the changes in the materials employed and the gradual evolution of conditions conducing to the comfort and health of the inmates are traced down to the end of the eighteenth or beginning of the nineteenth century.

The most interesting constructional feature, which appears to be characteristic of all the earlier examples given, is the form adopted for the principal rafters of the roofs. These are composed of two great curved pieces of oak, starting from stone bases on the floor against the side walls and meeting at the ridge, where they are halved and pinned and continued on a few inches in order to form a seating for the ridge-piece, which is set diagonally. In effect these timbers combine the principal rafter, wall-piece and curved brace of a roof truss in a single piece. In most instances they are connected by two horizontal ties. There can be little doubt, as the authors surmise, that this form of construction takes its derivation from the early hut, or wigwam, formed of boughs arranged in a circle and meeting at the top. Some considerable skill must have been exercised in the selection of trees suitable for conversion into timbers of the necessary size and form.

Another custom worthy of note is the primitive method of stopping wind and snow from entering the roof, between the thick, rough stone slates, by means of sphagnum moss, which was stuffed under the slates by the "moss man" with an iron bar flattened at one end.

The pleasing effect and absolute fitness for their purpose which are evinced in these cottages are, in a great measure, no doubt, due to enforced limitations as regards materials and primitive methods of construction, and the lesson they have to teach, as the authors of this book in their concluding remarks impress on us, is that, while utilising to the full the additional advantages we now possess, we should endeavour to observe always the same simplicity.

At the present time building operations are practically at a standstill as a necessary consequence of the war, but the period immediately following the cessation of hostilities will probably be one of considerable activity, particularly in connection with the housing of workers, and it is for us, as architects, to see that, so far as in us lies, the lessons taught by the study of these old buildings are not lost sight of. The first necessary step would appear to be to press for some modification of the Model Bye-laws, as applied to rural districts.

The illustrations, with which the book is freely supplied, are treated with a breadth and simplicity befitting the subject.

HERBERT PASSMORE [A.].

HOWARD CHATFEILD CLARKE.

"Mr. Howard Chatfeild Clarke, F.R.I.B.A., died yesterday from heart failure, following pneumonia, brought about by overwork. He had recently been actively engaged with surveys and valuations made all over the country at the request of the Ministry of Munitions, for which he acted as honorary adviser to the Ministry.

"Mr. Chatfeild Clarke was the son of the late Mr. Thomas Chatfeild Clarke, also a distinguished architect, and was a Fellow of the Royal Institute of British Architects and past president of the Surveyors' Institution (1914-15). Many buildings in the City and West-end were erected from his designs, among them the new hall for the Cordwainers' Company. He was surveyor to the Fishmongers' and Cordwainers' Companies, and to several of the leading insurance companies.

"Mr. Chatfeild Clarke was educated at Clifton College, and married a daughter of the late J. J. Galt, of Fernhill Park, Isle of Wight. He leaves three sons and three daughters. Two of his sons have commissions in the Army, and one of them has been reported missing and wounded."

The Times, 13th July 1917.

"ARCHITECT AND SURVEYOR."

A London burying affects those who take a part in it with a strange impression of unreality. The unfamiliar chapel, the undertakers marshalling the mourners and directing the procedure with business-like gravity; the swift motor-drive, interpolating a panorama of busy streets, the vast necropolis filled with unending ranks of similar headstones, produce in the observer a sense of pained detachment. It is as though we looked upon a pageant, to which a coffin was but the conventional accessory. Nothing is there of the comforting intimacy with which we accompany a dead friend to his place in a country churchyard; where the faces of those who carry him are known to us as they were to him, and the parson and the doctor have sat with us at his table, or ever they stood with us at his grave. Troubled by this strangeness of surroundings, I drew my thoughts inward while the minister said the words of his appointed office, and marked the reflections brightening and fading in the mirror of my memory.

Howard Chatfeild Clarke, Fellow of the Royal Institute, whose funeral, on July 16th, it was my sad privilege to attend as the representative of our President and Council, was a man eminent in his profession. Born of the great unitarian Chamberlain-Nettlefold-Preston family of the Midlands, he inherited a gift for the successful conduct of affairs. His work was of the rather specialised kind implied by the term "city practice," and he was himself a fine type of a group—I had almost said "caste"—of our confraternity, who are not often seen among their colleagues at Conduit Street. My own acquaintance with him dates from a good many years since, when, drawn into one of those troublesome, anxious, semi-legal affairs which none of us may hope to avoid altogether in the course of long practice, I was urged by my old and honoured friend, Howard Colls, to consult Chatfeild Clarke. I have always been grateful for that advice; it led me

to appreciate Mr. Clarke's ability and technical knowledge at their true—and very high—value, and set up a sincere friendship between us which, incidentally, helped to clear my mind of much rubbish picked up in the art-schools of the 'seventies. A shrewd, courteous, and painstaking arbitrator, he was not infrequently entrusted with duties analogous to those of the *architecte-expert près les Tribunaux*; and, in Court, his sound judgment, imperturbable demeanour, and known integrity, secured respectful attention to his views by judges and counsel alike.

Such men as Chatfeild Clarke—the "architect and surveyor"—are the blood and marrow of the Institute. The designation covers, at a guess, five-sixths of its members; for those who are able to restrict their practice to purely architectural work are but few, and they moreover are, or should be, surveyors, in respect of its execution. The Surveyors' Institution took Chatfeild Clarke to their bosom, and made him their President. Their gain was our loss. He never, so far as I know, allowed himself to be nominated for a seat at our Council-table; yet, of the men now sitting there, not a half-dozen, perhaps, are more widely known than was Chatfeild Clarke. I had hoped that, his term as President of the Surveyors ended, he might have come forward. The counsel of such men as he would be invaluable to our polity, and their presence would supply a very needful contact-point with administrative authorities, who regard with invincible, if unjustified, mistrust the aspirations of those who profess and call themselves "artists." Discussing the subject one day with Chatfeild Clarke, I asked him why leading "city architects" stood aloof or, at least, indifferent; and he was disposed to find the cause in lack of continuity, the constant, and apparently capricious, changes in the Council under the system of yearly elections, which disincline many useful men to accept so uncertain a tenure.

Be this as it may, their absence is to be regretted; the wide diversity of functions exercised by its members might be more accurately reflected in the governing body. Our wise forefathers, when they defined the purpose of the Institute they founded, wrote firstly, *usui civium*, leaving *decori urbium* to the second place; and rightly so, for the importance of the former is incomparably the greater to the commonwealth.

Much more might be said, but not here. A distinguished colleague has passed away, in whom we mourn a loyal friend and a wise counsellor. Hope tempers our sorrow; hope that his example and memory may profit our beloved profession; that our ranks, as they close to fill the vacant place, may be locked in firmer unity. If one saith, I am of academic Paul; and another, I am of civic Apollos; the increase desired by the "wise masterbuilder" will, of a surety, be denied. We must all go forward together, science, art, and industry, shoulder to shoulder; for all these are of our fraternity, and nothing which

concerns the building is foreign to us. "He that planteth and he that watereth are one."

So my thoughts drifted and dwindled. The faint scent of lilies came upon the breeze; and the whispering leaves stirred softly above the bier, as we stood, silent. It seemed strange that of him should have been exacted work beyond the limits of his strength, while many comrades stand idle and disheartened in the market-place, their wares unregarded by a nation intent on war.

JOHN W. SIMPSON [F.].

DAVID BARCLAY.

Mr. David Barclay, of the firm of H. and D. Barclay, died at his residence, Jordanhill, Glasgow, on 13th July, at the age of seventy-one years. The profession will mourn the loss of one of its most distinguished alumni, and Scottish architecture will miss the hand of an able exponent.

Mr. Barclay became a Fellow of the Institute in 1899, and served on the Council. He was President of the Glasgow Institute of Architects in 1900, a Vice-President of the Glasgow Art Club, a governor of the Glasgow School of Art, and a member of the Royal Glasgow Institute of the Fine Arts. He took a prominent part in the Incorporation of Masons, of which he was Deacon, and was a manager of the Royal Glasgow Asylum for the Blind.

In a long and varied career Mr. Barclay designed and carried out many notable works of architecture in his native city of Glasgow and throughout Scotland. In association with his brother Hugh, he designed the Municipal Buildings of Greenock, whose lofty and dignified tower forms a landmark for the thronging entrants to the estuary of the Clyde. In the same town he erected the James Watt Memorial Building on the site of the birthplace of that illustrious Scot, and which appropriately serves the purpose of a navigation school for the mercantile marine. This building, designed in the Scottish Renaissance style, is regarded as one of the most charming in the town of Greenock, and is one upon which Mr. Barclay bestowed a bountiful share of consummate skill and loving interest.

Mr. Barclay was an architect of great versatility. His executed works comprise a wide variety of subjects, including domestic, ecclesiastical and commercial buildings. But it is in the sphere of educational institutions that he is justly to be regarded as pre-eminently distinguished. His school buildings are to be found almost everywhere throughout Scotland and his name will for all time be associated with the evolution and development of school-planning. Among these buildings, the following selection, taken at random, may convey some indication of the scope of his activity in this domain. He was architect for the Royal Technical College, Glasgow, erected at a cost of some £250,000, for which his plans were selected in competition; the Training College for Teachers,

Jordanhill, Glasgow; College of Hygiene and School Clinics, Dunfermline, for the Carnegie Dunfermline Trust; Technical, Higher Grade and Primary Schools, Dunfermline; Govan High School, Glasgow; Coatbridge Higher Grade School; Stranraer High School; Queen's Park Higher Grade School; Greenock Academy, the Glasgow Academy, and numerous schools for the Govan and Glasgow School Boards and for other Boards throughout the country.

In the realm of domestic architecture Mr. Barclay's activities were also considerably great. His executed work in this field comprises Balinakil Mansion House for the late Sir Wm. Mackinnon, Bart., extensive additions to Gartmore Mansion House for the late Sir Chas. Cayzer, Bart., M.P.; Whitehouse, Lamlash, and many other smaller residences in and around Glasgow. He was also the architect for the Sailors' Orphan Homes, Kilmacolm, a building which enhances the beauty of a pleasant landscape.

In church architecture Mr. Barclay's name is associated with some notable town churches, while in the realm of commerce many large warehouses and business premises were erected under his hand.

With regard to his attainments much might be said. A man of unerring judgment and endowed with highly developed powers of discernment, he was an extraordinarily expert planner, and no problem with which he was called to deal failed to find a rational solution. In the many works he won by competition it was this power of planning that often carried the victory; and, as he on one occasion remarked to the writer, to work out a difficult planning problem delighted him more than a game of chess.

In architectural design his work was based upon a sound traditional training in the styles, and a remarkably beautiful refinement of detail, particularly among his earlier works, reveals his fondness for the Classic. At the same time his work in the Gothic and Renaissance field displayed a real and sympathetic intimacy with these manners, and he delighted to linger upon an ancient cathedral church with pencil and sketch-book, which he employed with a facility that remained with him to the last. As a constructionist, too, his skill was great. Indeed, so fine were his conceptions of proportion and fitness to mechanical function, that his science, it might be said, with him was an art.

A just and generous man, a true Scot, adorned with the best attributes of his race, Mr. Barclay was respected by clients and contractors, esteemed by his friends, and admired by his colleagues as an exponent of what is best in architecture.

Glasgow.

C. S.

GERALD HORSLEY.

In the last number of the JOURNAL Mr. Arthur Keen has contributed a very able and sympathetic appreciation of the late Gerald Horsley, with whom he worked for several years in Mr. Norman Shaw's office. I regret that, owing to a misunderstanding as to the

date of the publication, these few words of mine should not appear till so many weeks after his death.

I enjoyed a very close and intimate friendship with him for more than thirty years, and those who, like myself, knew him well will feel that by his death we have lost not only an accomplished architect and a very remarkable draughtsman, but a most upright and affectionate friend. I shall always treasure the memory of many little holidays we spent together in Italy, France and Belgium. Travelling is a great test of character, but my recollection of these times is that in all circumstances he was always an unselfish and cheerful companion.

If I were asked what were the most marked traits in his character, I should say single-mindedness, reliability and devotion to duty. Anything in the way of self-seeking was quite foreign to his nature, and whatever he did was done with unusual thoroughness. He undertook the work of Honorary Secretary to many committees and societies with a devotion which must have made very large demands on his time and strength.

Soon after the outbreak of the War he joined the Architects' Volunteer Battalion from a sense of duty and for the sake of example. It is to be feared that the severe physical strain he imposed on himself contributed largely to undermine a constitution which was unfitted for such exertions. But his example bore good fruit, and many young men followed him into the ranks and later joined the Army.

By his unassuming ways, his affectionate disposition, and his unfailing courtesy and kindness he had a great influence for good on all those who came into contact with him, and his loss will be deeply felt by a very large number of friends to whom he had endeared himself in countless ways.

ERNEST NEWTON [F.].

Air Raids.

Guildhall, E.C.2: 7th August, 1917.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—At a meeting at the Mansion House it was decided that the occupiers of certain buildings in the City should be asked to exhibit notices stating that the public could take refuge there. It was necessary to make a survey of the whole city as quickly as possible, and I should like to acknowledge in our JOURNAL the prompt and valuable assistance so kindly given by Messrs. Aickman, Max Clarke, Cross, Davidge, Gosling, Goldsmith, Hornblower, Lanchester, Marks, Martin Saunders, Shepherd, Stevens, Surrey, Lewis Solomon, Stenning, Tubbs, and Wigglesworth.

Yours obediently,

SYDNEY PERKS,

City Surveyor.



9 CONDUIT STREET, LONDON, W., 25th Aug. 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-sixth List.

Fallen in the War.

EATON, Captain CHARLES WILLIAM, Leicester Regiment [Associate, 1906]. Died of wounds. Aged 35.

WRIGHT, Second Lieut. CECIL LAWRENCE, Royal Garrison Artillery [Associate, 1910]. Killed in action in France on 7th July. Aged 37.

APPLEBY, Second Lieut. SIDNEY DERRICK, Loyal North Lancashire Regt. [Student, 1913]. Missing, believed killed in action.

When last seen, Second Lieut. Appleby was gallantly leading his men between the German first and second lines. Then a shell burst close to his party, and neither the survivors nor subsequent search parties could find his body. "A very gallant officer and a great favourite with us all," writes his Company Captain. At the outbreak of the war Second Lieut. Appleby was on the staff of Messrs. Bradshaw, Gass, and Hope, of Bolton.

Members' Sons.

BOWLES, Sub-Lieut. GEOFFREY C., R.N.V.R. Killed in action. Son of Mr. Charles W. Bowles [F.]. Second Lieut. B. J. Bowles, of the Buffs, another son of Mr. Bowles, was killed last September.

FELLOWES PRYNNE, Second Lieut. NORMAN, Devon Regt. Reported missing and believed killed in action as from 24th April last. Fifth and youngest son of Mr. G. H. Fellowes Prynne [F.].

Wounded; Awards, etc.

Brigadier-General A. B. HUBBACK, C.M.G. [F.], was reported wounded in the list issued on 12th July.

Lieut. HARRY W. MANN [A.], who rejoined the Essex Yeomanry on mobilisation and went to France in November 1914, was wounded at Hooge in May 1915, received a commission in the R.F.A., in September 1915, was wounded at Loos in July 1916, gazetted Lieut. in January 1917, and was mentioned in Despatches in June last.

Second Lieut. E. A. RAHLES RAHBULA, R.F.A. [A.], has been awarded the Military Cross: "As forward observing officer to his battery he showed great fearlessness in laying out telephone wires across the open to exposed posts, from which he directed the fire of his



Lieut. GEORGE AUGUSTUS BLIQH LIVESAY, *Fellow*.
South Wales Borderers.
Killed in action (see p. 13).



2nd Lieut. STANLEY W. WOODLEY, *Student*.
Royal Flying Corps.
Killed in action (see p. 102).



Lieut. GEORGE WILFRED CALLENDER, *Associate*.
Worcestershire Regiment.
Killed in action (see p. 173).



Lieut. JOHN LUCAS WARRY, *Associate*.
Sherwood Foresters.
Killed in action (see p. 173).



Lieut. CHARLES ERNEST LOVELL, *Associate*.
Royal Engineers.
Died of wounds (see p. 173).



2nd Lieut. ALFRED WYATT PAPWORTH, *Associate*.
Royal Engineers.
Killed in action (see p. 160).



HENRY FRANKLIN PATERSON, *Probationer*.
Hon. Artillery Company.
Killed in action (see p. 29).



WILLIAM JACKSON PWELLS, *Associate*.
Hon. Artillery Company.
Killed in action (see p. 150).

battery. He also showed great skill and resource in destroying enemy entanglements by the fire of his battery, and by personal observation he was able to render the utmost help to his brigade."

Second Lieut. C. J. M. YOUNG, R.E., elder son of Mr. George P. K. Young, [F.], of Perth, has been awarded the Military Cross. "He made a strong point close to a village under heavy fire of all kinds. He commenced work while the village was still occupied by the enemy. By his rapid work the main position was made secure from counter-attacks." Mr. Young's younger son, a pilot in the R.F.C., was among the aviators engaged in the air above the spot where his elder brother was operating.

Captain PERCY T. RUNTON [A.] was mentioned in the *Gazette* for 21st June for valuable services in connection with the war.

Serving with the Forces.

The following have to be added to the list, bringing the total to 76 Fellows, 523 Associates, 321 Licentiates, and 297 Students:—

FELLOWS.

Pullar, E. J.: Indian Army Reserve of Officers.

LICENTIATES.

Paterson, Gavin: Lieut.-Col., Cameronians.

Wright, Osborn: A.S.C. Cadet Co.

Mackinnon, W.: Lieut., London Scottish.

Graham, P. H.: New Zealand Expeditionary Force.

STUDENTS.

Waller, T. J.: 2nd Lieut., Northumberland Fusiliers.

Harrison, F. C. S.: Durham Light Infantry.

Promotions.

Corporal Walter P. Rylatt [A.] has been granted a commission as Second Lieut. in the R.G.A. Special Reserve.

Hon. Lieut. R. P. Oglesby, Staff R.E.S. [Licentiate], serving in France, has been promoted Hon. Captain.

To Architects claiming Exemption.

Mr. Francis Hooper [F.] having suggested at the June Business Meeting that application should be made to the authorities to allow appeals of architects for exemption from military service to be adjudicated upon by a tribunal of architects sitting at 9 Conduit Street, the Council referred the matter to the Architects' War Committee. The matter was discussed at the Committee's Meeting on the 2nd August, but in view of the small number of architects now remaining to be dealt with and the general undesirability of interfering with the ordinary course of recruiting, the Committee decided to recommend the Council to take no action in the matter. It was suggested, however, that architects who have strong grounds for claiming exemption should communicate with the Secretary of the Institute, and their claims would then be dealt with and laid before the authorities if such a course seemed desirable.

Inns of Court Officers' Training Corps.

Sir Alfred L. Goodson, Director of Organisation, Inns of Court Officers' Training Corps, asks for assistance in making known to suitable men who are, or will shortly be, free to

join the Colours the facilities his Corps offers for the training of suitable candidates. As a general rule, only men passed fit for General Service will be considered, but occasionally a small number of vacancies occur for men classified B 1 and C 1. Only men whose physical health and other very special qualifications in the opinion of the Selection Board fit them for commissions in Labour and such like Battalions can be considered for these. The Corps trains primarily for Infantry, but frequent opportunities occur for men to be selected for Artillery and the Royal Flying Corps, and occasionally men are passed out for other branches of the Army, such as the Cavalry, Royal Engineers, Army Service Corps, and Army Ordnance Department. Suitable recruits desiring Commissions in the Mounted Units of the Army may also be accepted for training in the Mounted Branch of the Corps, "The Inns of Court Troop," at present attached to a Reserve Cavalry Regiment at Tidworth. Candidates are advised to come before the Selection Board about one month before they become liable for service with the Colours. Uniform, boots, accoutrements, underclothing and other necessities are issued free. After posting, recruits are sent to join the Corps at Berkhamsted, where they receive pay at the usual Army rates. Full particulars may be obtained from the Officer Commanding, Inns of Court Officers' Training Corps, 10 Stone Buildings, Lincoln's Inn, W.C.

Working-Class Housing Schemes and Architects.

Having been requested by Mr. Hayes Fisher to appoint a representative of the Institute to serve on the Committee which has been set up by the Local Government Board to consider various technical questions in connection with the building of the large number of houses for the industrial classes that will be required after the war, the President has nominated Sir Aston Webb, who has accepted the position. The other members of the Committee are Sir John Tudor Walters, M.P. (Chairman), Sir Charles Allom, Mr. F. Paines, M.V.O., Mr. James Boyton, M.P., Mr. William Fairley, M.Inst.C.E., Mr. G. Marlow Reed, Mr. J. Walker Smith, A.M.Inst.C.E., Mr. J. Squires, and Mr. Raymond Unwin [F.]. Mr. E. Leonard, of the Local Government Board, is Secretary.

A Committee of the Institute has been constituted by the Council and is now sitting to consider the whole matter of the housing question from the architect's point of view. The Committee consists of the President, the Hon. Secretary, Sir Aston Webb, Professor Patrick Abercrombie, Professor Adshead, Mr. W. R. Davidge, Mr. W. A. Harvey (Birmingham), Mr. Arthur Keen, Mr. H. V. Lanchester, Mr. D. B. Niven, Mr. G. Gilbert Scott, Mr. John W. Simpson, Mr. H. D. Searles Wood, Mr. George Hubbard, F.S.A., and Mr. Percy B. Tubbs. The Allied Societies have been invited to nominate representatives to serve on the Committee. A suggestion by the Manchester Society that separate local committees of the Allied Societies should be formed to deal with local schemes and to keep in touch with the Central Committee in London met with the Committee's approval and they have recommended its adoption.



2nd Lieut. HERBERT SAMUEL TAYLOR,
Oxford and Bucks Light Infantry.
Reported wounded and missing,
believed killed (see p. 189).



2nd Lieut. JAMES MONTEITH McLEAN, *Student*.
Highland Light Infantry.
Killed in action (see p. 229).



WILLIAM ARTHUR RIGG, *Associate*.
Middlesex Regiment.
Killed in action (see p. 221-222).



2nd Lieut. ALFRED GEOFFREY BEVILLE, *Probationer*.
London Regiment.
Killed in action (see p. 189).

R.I.B.A. Research: The Problem of Dry Rot.

In the last Annual Report mention was made of the Research Committee which the Council had appointed to act in conjunction with the Government Advisory Committee on Scientific and Industrial Research and various other bodies engaged in research work for the investigation of problems requiring solution in regard to the use of building materials. One of the most important subjects taken up by the R.I.B.A. Committee is that of Timber in Relation to Decay and Preservation, and the Government Research Committee having invited their suggestions, the Committee drew up and submitted to them a memorandum urging that a liberal grant should be voted for the purpose of research into the Causes and Prevention of Dry Rot in Timber, on the following grounds:—

I. *Danger to Life*.—Dry rot destroys the fibres of the timber, with the result that the stability of buildings in which dry rot has occurred is often endangered.

II. *Annual Loss*.—The annual loss both to the private individual and to the community is very considerable. It is not possible to indicate the actual amount of such loss, as no statistics are available, but it is unquestionable from the number of cases annually reported by architects that the disease is very prevalent, and that an enormous number of buildings throughout the country are infected with dry rot in some form or other.

III. *Reasons for Increase in Prevalence of Dry Rot*.—A very large proportion of the "constructional" (as opposed to "decorative") timber used in this country is imported from Norway, Sweden, and Russia, and owing in great part to the depletion of the more favourably situated forests a greater amount of immature, dead, and otherwise unsuitable timber has been imported during the last few years than formerly.

This unsuitable timber is much more liable to the attack of the dry rot fungus than timber of better quality.

Further, as the disease is contagious, it is very probable that the ships used for carrying timber may be infected from a load of diseased timber and communicate it to successive loads otherwise sound.

Infection of sound timber may also occur in timber yards in this country.

IV. *Amount of Saving Resulting from Research*.—As it is impossible to state with any accuracy the annual loss resulting from the disease, so it is impossible to indicate what saving would be effected. It is unquestionable, however, that the money spent on research work would be repaid to the community in a very few years owing to the saving of timber.

V. *Scheme of Research*.—A definite detailed scheme of research would cover the following points among others:—

(1) Investigation as to how many kinds of dry rot exist, their characteristics, and the conditions determining their infection and growth.

(2) Investigation as to whether dry rot can occur in the living tree, and if so,

(a) What can be done to cure the disease.

(b) What can be done to inoculate the tree against the disease.

(c) Whether it is possible for one tree to infect another in the forest.

(3) Investigation into the efficacy of various antiseptics, including various methods of treatment, as regards the prevention, destruction, elimination, in-

cubation, and growth of the fungus, commercial cost being considered as well as toxic properties.

(4) Discovery of suitable new antiseptics.

(5) Investigation into what extent natural or artificial drying or seasoning of timber is effective in killing, reducing, or preventing the disease.

(6) Investigation into the length of time that the spores of the disease can remain latent in the timber awaiting a suitable environment for recrudescence.

(7) Investigation into what extent the spores of the disease can pass through the pores of concrete, brick, stone, etc.

(8) The effect of environment and soil in producing timber having a susceptibility towards dry rot.

(9) Investigation into the effect of temperature on the life of the spores.

(10) Investigation into the methods of transmission of dry rot, and the possibility of sound timber becoming infected in the holds of ships in transit.

VI. *Locality of Research Centre and Scope of Work*.—It is suggested that research and investigation into the matters above mentioned—with the exception of those actually concerned with the living tree—could most suitably be carried out at an Institute specifically founded for the investigation of dry rot, preferably working in conjunction with, or attached to, an existing institution already possessing technical experts in these subjects. It may be mentioned that such an Institute has been founded in Germany, and endowed with proper buildings and equipment.

It would be advisable for such an Institute to have its own separate and independent governing body, which should be largely composed of practical men.

Such an Institute should work in fullest collaboration with the Board of Agriculture and Fisheries, the Board of Trade, H.M. Department of Woods and Forests, H.M. Office of Works, and the Imperial Institute; and should be in constant touch with the various professional associations such as the Royal Institute of British Architects, the Surveyors' Institution, the Institute of Builders, etc.

Such an Institute should have its literary-extracting department, where a complete record should be kept of the various books, pamphlets, lectures, etc., both in English and in foreign languages, on the subject of dry rot. In fact one of its first duties might usefully be the translation into English (and a "digest" therefrom) of such a standard work as exists in the German language as *Hausschwamm Forschungen* (published by Gustav Fischer at Jena, 1907-13, and edited by Professor Dr. A. Möller, in six or seven volumes).

It should also have its publicity department, where the results of its researches, incorporated with the knowledge obtained from foreign publications and from research work in foreign countries, might be periodically issued. In fact, the issue of a monograph from time to time on the knowledge obtained up to date appears to be the natural sequence of the research, and one of its most useful and important functions. For this reason, as well as for others, the scope of the research scheme should be permanent. It is considered that it will take many years before the subject is sufficiently well understood to ensure that the evil may eventually be eradicated.

The cost of founding an Institute on the above lines and the annual grant required to carry on the work, would be matters for further consideration if the Government Advisory Committee approve of the suggestions above put forward.

America and the War: International Greetings.

The following letters have passed between the Royal Institute of British Architects and the American Institute of Architects:—

14th June 1917.

To the President and Council of the American Institute of Architects,—

GENTLEMEN,—Probably no group of Britons has been wont to enjoy a closer bond of intimacy and mutual understanding with its corresponding group across the Atlantic than that which has so long and so happily subsisted between the architects of your great country and of ours.

For this reason, if for no other, it seems natural to us to yield to a very evident desire among our members, the desire to give expression to the cordial and affectionate satisfaction which we feel in the recent practical evidences of close community between our nations.

The world-struggle, a fight not on our side for material possessions but for the maintenance of those ideals which are the most precious heritage of man, is, as we all feel, not one in which the exponents of our art are without interest.

Architecture, the least luxurious and the most humane of the arts, can never be aloof from the deeper and worthier instincts of mankind. We feel confident, therefore, that if we, as representing in our degree the architects of Great Britain, send you at this momentous juncture a word of heartfelt international greeting you will not think that we are departing from the proper functions of a professional Institute.

Had we any doubt on this point, that doubt would be removed by our remembrance of the remarkable utterances of Mr. Cram, in October 1914, and the comments of Mr. Clipston Sturgis on the position of England in the War, which, together with other expressions by American architects on the subject, have been very eagerly read and warmly appreciated here.

Gentlemen, the heart of England has been warmed by America's action. We British architects are not the slowest to feel that warmth; and knowing that with you, too, the pulse of national life is strong, we feel a lively satisfaction in sending to you—as architects to architects—our very cordial welcome and our acknowledgment of profound pleasure in this union of the already kindred races.

In conclusion, we would beg that, so far as it may be practicable, you will regard this message of ours as a message to the general body of architects in the United States.

With renewed expressions of brotherly goodwill,

We are, Gentlemen,

Yours very faithfully,

ERNEST NEWTON, *President.*

HENRY T. HARE, *President-Elect.*

PAUL WATERHOUSE, *Vice-President.*

E. GUY DAWBER, *Hon. Secretary.*

The following reply has been received from the American Institute:—

The Octagon, Washington, D.C. 12th July 1917.

To the President and Council of the Royal Institute of British Architects,—

GENTLEMEN,—True it is that the exponents of our art, as represented by the Royal Institute of British Architects on the one side of the Atlantic and by the American Institute of Architects on the other, have happily enjoyed that very real understanding and that close bond of intimacy which spring from a unity of purpose and of ideals.

At the moment when our country has announced to the world, and especially to our autocratic enemy, its common interest with your great country and our other Allies, your warm welcome is deeply appreciated.

Through the long months and years of your self-sacrificing struggle, when the words and acts of many of our profession betokened a sympathy which official neutrality could not stifle, our hearts have bled not alone for the lives so freely given of the youth of promise in our profession, but for the wanton destruction of those monuments of our art which age and tradition have made our common heritage.

And through these months of the duration of our war for the maintenance of those ideals which make of the world a worthy and happy dwelling-place for man, we have longed for the striking of that inevitable hour when we might stand shoulder to shoulder, brothers in arms as well as brothers in art, while our country, slow to anger, perhaps, but flaming at its core with a burning conviction of the righteousness of our common purpose, might throw its pent-up energy into the fray which threatened the liberties of the civilised world.

And so to you, Gentlemen of the Royal Institute of British Architects, greeting and heartfelt appreciation of the impulse which prompted your ringing words of welcome, and with our greeting comes a reciprocating impulse to extend our eager hands to you across the sea which no longer separates us.

With renewed thanks for your message of welcome into the true brotherhood of man, we are,

Yours very faithfully,

JOHN LAWRENCE MAURAN, *President.*

WILLIAM STANLEY PARKER, *Secretary.*

The Council have offered the hospitality of the Institute to American architects on service who find themselves on this side of the Atlantic and within convenient reach of London, and have extended to them certain privileges of membership, such as the use of the Institute premises and Library and attendance at meetings and other functions. They are also given the opportunity of borrowing books from the Loan Collection. It is hoped that members of the Institute coming in contact with American architects will make this offer known to them.

Chair of Architecture, University of Sydney, N.S.W.

Applications are invited for the chair of architecture at Sydney University, New South Wales. The salary is £900 per annum and £100 allowed for travelling expenses to Sydney. A pension of £400 per annum under certain conditions will be granted after twenty years' service. Duties commence in March 1918. Particulars may be obtained from the Agent-General for New South Wales, Sydney House, 26-27 Cockspur Street, London, S.W.1, to whom applications stating age and qualifications, and accompanied by references and ten copies of three recent testimonials should be sent not later than Thursday, 1st November 1917.

Members' Appointments.

Mr. ARTHUR T. BOLTON, F.S.A. [F.], *Soane Medallist* (1893) and *Institute Essay Medallist* (1895), has been appointed Curator of Sir John Soane's Museum, Lincoln's Inn Fields, in succession to the late Mr. Walter L. Spiers.

Mr. H. P. BURKE DOWNING [F.] has been appointed Diocesan Surveyor for the Diocese of Chichester in succession to Mr. Lacy W. Ridge, who has resigned after holding the appointment for nearly fifty years.

THE EXAMINATIONS.

The Intermediate Examination.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London from the 1st to the 8th June. Of the six candidates examined, three passed and three were relegated. The passed candidates, who have been registered as Students, are as follows, the names being given in order of merit:

GUNSTON: Edward Leslie [P. 1913]; Alpenrose, Kidmore, Reading.
WADDICAR: Arnold [P. 1915]; Laburnum House, Pool Street, Bolton.
CLARK: Richard John Bond [P. 1912]; 24 Lanoweth Road, Penzance.

Exemptions from the Intermediate.

The following Probationers, having produced satisfactory evidence of their training and qualifications, were exempted from sitting for the Intermediate Examination and have been registered as Students:

BUTTERWORTH: Harold; 49 Sherbourne Road, North Shore, Blackpool. (Manchester University.)
BYROM: Richard [P. 1915]; 223 Tottington Road, Elton, Bury. (School of Art, Manchester.)
CHAUDHURI: Arya Kumar [P. 1915]; 34 Bedford Square, W.C. (Architectural Association.)
DHUPKAR: James John [P. 1916]; c/o Consulting Architect, P. W. D., Fort, Bombay. (Sir J. J. School of Art, Bombay.)
GREGORY: Hubert [P. 1919]; Woodburn, Ben Rhydding, Yorks.
HOLT: Felix [P. 1914]; 15 Hamilton Road, New Brighton, Cheshire.
HUDSON: Lieut. Philip Sidney [P. 1913]; Royal Hospital, Chelsea.
JENNINGS: Gordon Sothan [P. 1912]; Silverdale, Bloomfield Road, Mossley, Birmingham. (Birmingham Municipal School of Art.)
KELLY: Michael Richard [P. 1913]; Sunnyside, Marlboro' Park, Belfast. (University of Liverpool.)
McMICHAEL: Alastair Marshall; Bank House, Callander. (Glasgow School of Architecture.)
MASON: Harold Clayforth [P. 1917]; Kelsick Road, Ambleside. (Liverpool University.)

MOUNTAIN: Albert Horace; 46 St. Julian's Avenue, Newport, Mon.
PADGET: Montague William [P. 1914]; 21 Park Square, Newport, Mon. (Newport Technical Institute.)
POTDAR: Vasant Chintaman [P. 1917]; Bombay Road, Thana, Bombay. (Bombay School of Art.)
PRIEST: Alfred Llewellyn [P. 1915]; 17 South Lutton Pl., Adamsdown, Cardiff. (Cardiff Technical College.)
REIXA: Frederico [P. 1914]; 27 Ennismore Avenue, Chiswick. (Architectural Association.)
REMNAUT: Eustace Archibald [P. 1914]; 185 Croydon Road, Anerley, S.E. (L.C.C. School of Building.)
SAO: Shantaram Shamrao [P. 1917]; 2nd Chuni Bhatti, Kurla, Thana, Bombay. (Bombay School of Art.)
SEERVAI: Jehanbax Framroze [P. 1917]; 41 Bazar Gate, Fort, Bombay.
TEASDALE: John Stuart [P. 1914]; Church Road, Charlwood, Surrey.
TUBBS: Grahame Burnell [P. 1912]; 2 Moor Street, Cadogan Square, S.W. (Architectural Association.)
WOODHOUSE: Francis Pery Mark [P. 1912]; Southmead, Wimbledon Park. (Architectural Association.)
YARDLEY: James Howard [P. 1915]; Rathmore, Stourbridge. (Malvern College, Worcester.)

The following Probationers serving with the Forces who are eligible for the Intermediate Examination and whose Testimonies of Study have been approved, have also been exempted:

ATHRON: Thomas Sydney [P. 1912]; 48 Christ Church Road, Doncaster. (Royal Fusiliers.)
BAILEY: Clarence Howard [P. 1914]; "Hillside," Skegby, near Mansfield, Notts. (Royal Engineers.)
BURFORD: James [P. 1911]; 37 Lee Park, Blackheath. (Artists' Rifles.)
EVANS: Eric E. [P. 1911]; c/o Matthew Honan, Esq., 36 Dale Street, Liverpool.
FERGUSON: J. S. [P. 1916]. (Royal Engineers.)
HAYWOOD: Algar Arthur Newton [P. 1915]; 25 Farm Street, Mayfair, W. (R.N.V.R.)
LAWRENCE: Henry Matthew [P. 1915]; 22 Marmion Street, Tamworth.
LAWSON: Edwin Maddeson [P. 1915]; Fairfield, Ivanhoe Terrace, Chester-le-Street, Durham. (R.N.D.)

The Final and Special Examinations.

The Final and Special Examinations were held in London from the 21st to the 29th June. Of the 13 candidates admitted, 4 passed, and the remaining 9 were relegated. The successful candidates are as follows:

BRETON: Humphrey Albert [Special]; Public Works Ministry, State Buildings, East Division, Cairo.
HENRIQUES: Elias Cosmas [S. 1915]; 21 Cromwell Road, S.W.
RAYSON: Thomas [S. 1914]; 179 Park Lane, Tottenham, N.17.
STAINSBY: George Pawson [S. 1912]; 2 Sutton Street, Durham.

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ARCHITECT requires Office, with telephone and attendance—preferably in the Paddington district. Address The Secretary, R.I.B.A., 9 Conduit Street, W.



LOMBARD ARCHITECTURE.

Lombard Architecture. By Arthur Kingsley Porter. 3 vols. 4o. and 1 portfolio of illustrations. Yale University Press.
[London: Humphrey Milford, Oxford University Press.]

IT is not possible within the compass of a magazine article to discuss and review fully Mr. Porter's great work, which runs to 1,740 pages of text, with about 1,200 or 1,300 illustrations. It is a monument of exhaustive exploration of a limited subject perhaps unprecedented, for it includes only the early architecture of the Lombard plain down to the end of the twelfth century. Mr. Porter describes over 200 buildings of Lombard architecture, and others in different parts of Italy, in France and in England, where he finds analogies with his subject. Besides a portfolio of 244 loose plates, each containing several illustrations, his work extends to three volumes. The first is devoted to a history of the development of the architectural style, and of the sister art of sculpture; the other two contain an elaborate account of each building illustrated, with the documentary evidence for its history and date; and here we cannot be too grateful that, instead of giving his authorities, as some authors do, in a mere translation, Mr. Porter has given us the original text.

Lombard architecture has an especial interest for Transalpine lands because of the influence it exerted on the Romanesque of Germany and France, particularly on the School of Normandy, and through that on the early work of our own country after and even before the Norman Conquest. William of Volpiano, in Lombardy, became Abbot of S. Benigne, in Dijon, in 990, and there he built between the east end of a basilican church and an earlier Lady chapel a strange structure of two circular aisles, three storeys high, surrounding a circular space in the middle, which was open to the sky like the original rotunda of the Holy Sepulchre at Jerusalem. This building stood till 1739, when it was illustrated by Plancher,* but at present the crypt alone remains. In detail the architecture is barbarous enough, but the conception of the design is striking and interesting. It is curious that Abbot William's rotunda, which was dedicated in 1018, seems to have been imitated in our own country before the Norman Conquest. About 1049 Wulfrie, Abbot of S. Augustine's, at Canterbury, returned from France, where one may imagine he had seen the church at Dijon, and at the end of his basilica, connecting it with an existing Lady chapel, he too built a round chapel, of which the foundations have lately been laid bare. The monks, however, it is recorded, found it inconvenient and uncomfortable, and so, although the county of Kent rejoiced in its beauty, Abbot Scotland pulled it down in 1080 when he built his new choir.†

From Dijon William the Lombard was induced by Duke Richard I. to come to Normandy, where he became Abbot of Fécamp and carried out many architectural works. With the Normans their style, based on Lombard influence, passed into England, and the lessons of William of Volpiano may

* *Histoire générale et particulière de Bourgogne.*

† "Letabatur novo opere Cantia, quamquam monastice

habitationi incongruum fecisset artificum imperitia."—*Gocelin*: See the account and plans in *Archæologia*, vol. 66.

be traced in our own Romanesque, in promoting which the two Lombard Archbishops of Canterbury, Lanfranc of Pavia and Anselm of Aosta, played so large a part.

In the sixth century, before the Lombard invasion, the Byzantine style pervaded all Italy, not excepting Rome, for Greek paintings and inscriptions are to be seen in the lately excavated Church of Sta. Maria Antiqua. It continued even under the Lombards, for the church built by Queen Theodelinda at Monza in 595 was on the plan of a Greek cross with a dome. Her church has disappeared, pulled down in the thirteenth century, but in the treasury we can still see her gold *Chioccia*, her "chucky" hen and chickens. At Milan the Church of S. Satiro, now adjoining S. Ambrogio, was built with a dome formed like that at S. Vitale, Ravenna, with earthen jars laid spirally. But with the firmer establishment of the Lombard kingdom Greek artists were, no doubt, driven away, and their art went with them. From the eighth century onwards we get a sequence of buildings in a new style which we call Lombard, of which S. Salvatore at Brescia, which Mr. Porter dates about 760, is an early and typical example.

Mr. Porter, I am happy to find, does not accept the myth of the Comacine builders. It depends mainly on an edict of King Rotharis in 648, addressed to the *Magistri Comacini*, relating to liability for accidents arising from building. To suppose, as some have done, that a little islet in Lake Como, the *Insula Comacina*, was at one time the refuge of all the polite arts of Italy, is ridiculous. No doubt a large part of the peaceful Romans, artisans among them, fled from the Lombards to the security of the mountainous districts round Como; they would be drawn from thence when their new lords wanted craftsmen and builders; and not only men but materials, wood, stone and marble, would be brought thence into the plains, where no materials of the kind were otherwise to be had. But Como was only one centre of the building trade. There were many more; at Ravenna, for instance, and Rome, whence Cassiodorus tells us Theodoric imported marble masons, who knew how to put together the figured marbles so that "by corresponding veins they should laudably falsify their natural face; and that nature should be surpassed by art, and the diversified incrustation of marble should be composed with the delightful variety of a picture."*

The mystery of the *Magistri Comacini* provokes inquiry into the status and methods of work of the mediæval architect and craftsman, and there are few more interesting subjects for the archæologist. We are indebted to Professor Lethaby for the discovery of the artists who successively worked on Westminster Abbey, and similar discoveries in other places no doubt await those who bring sufficient knowledge and patience to the task. Italy affords easier access to the secret, for the artists there more generally recorded their names on their work. Mr. Porter in his second chapter makes a large contribution to our knowledge of the subject, and not only gives a long list of names but traces the work of several individuals in different places.

His plate 141 is an illustration from a miniature where the construction of the Duomo of Modena is depicted. The architect, named Lanfrancus, is giving directions to labourers, *operarii*, and bricklayers, *artifices*, and is helping the Countess Matilda and the Bishop of Reggio to lift the lid, *lapis monumenti*, of the saint's tomb. Below are armed men, *custodes monumenti*, six soldiers and sixteen citizens who had been sworn to guard the relic from violation. Lanfrancus is well dressed, and carries a stout bludgeon, and his black hair and whiskers are so carefully repeated in all three cases that it implies an attempt at portraiture. Lanfrancus is described in the account of the translation of the body of S. Geminianus as a *mirabilis aedificator*. He plays a prominent part in the ceremony, for, while the Bishops, Cardinals, clerks and laymen are praying and chanting, "the most blessed body of our most holy Father Geminianus is with wonderful reverence uncovered and exposed by the hands of Bonus the elder, Bishop of Reggio, and Lanfranc, the architect, with many tears and prayers."† The action of the workmen and the form of their tools is very interesting. The bricklayers use pick-hammers.

Mr. Porter traces design in the irregularity of some of the plans of Lombard churches. He says,

* Cassiodorus, Var. 1.6.

† Vol. 3, p. 14.

"before the year 1000 the barbarity of mechanical exactitude was as studiously avoided as in later times." But his instances are not very convincing. At S. Vincenzo, Milan, the side walls taper eastward, but that could not have any æsthetic effect because the arcades which hide them are parallel and regular. At S. Ambrogio the axis of the church is inclined to that of the atrium, but they never could be seen together. The side walls of the atrium are irregular, but the colonnade which hides them is regular and rectangular. Mr. Porter says this asymmetry is "patent to any one" not blinded by preconceived prejudice"; but one may be sensible of the fact without tracing it to an artistic idea. It is difficult to believe that the rude Lombards, who built S. Vincenzo in the ninth century with odds and ends of late Roman and Byzantine work, and scratched a few barbarous capitals of their own, were so sensitive of the barbarity of symmetry as to build things purposely awry. It would be strange if the most ardent believer found an artistic motive in the plan of Fontanella (plate 90) except on the ground that its crookedness seems too gross to be a builder's bungle. Isidore of Seville indeed writes that unless all things in building are upright and regular there will be failure; but Mr. Porter says this only shows that Isidore ought to have known better what was going on about him, and was ignorant of the building traditions of his day. In a later chapter* Mr. Porter says the Cathedral of Modena is remarkable for its asymmetries, including those of elevation, for the apses lean to the north, and the campanile to the south. He admits, however, that the upper part of the latter shows a decided tendency to return to the perpendicular. Similar "refinements," I need hardly say, are to be found in modern buildings sometimes.

In a succession of interesting chapters, which deserve careful reading by students of architecture, Mr. Porter traces the gradual development of the Lombard style from the rudest beginnings to Modena, which he thinks was a great centre of the school, much as Gloucester was for the later Gothic of England, and onward to the assured dignity and refinement of S. Zenone at Verona at the end of the twelfth century, when the dawn of Gothic was beginning to break. His subject is a fascinating one, and his work has evidently been a labour of love. We may not always agree with him in tracing the connexion and influence of style on style in different countries, though his arguments are always worth listening to. But there can be no doubt of the debt we owe Mr. Porter for the magnificent collection of examples which he has formed. They are, unfortunately, all photographic, and, like all photographic illustrations, frequently obscure, and still oftener dull and inexpressive. But the value of Mr. Porter's volumes will always be great, not only as illustrating an interesting chapter in architecture, but as a record of buildings worn with age and neglect in many cases, likely to be altered in others, and in some exposed to destruction. Regarded from the archæological as distinct from the artistic side we cannot praise too highly the pains he has taken in collecting the historical references to each building, and examining and publishing for us the ancient documentary evidence. That part of his work is the fruit of an amazing amount of research, and one may imagine there is no more to be said on the subject. As a book of reference for the history of Lombard architecture recourse must always be made in future to Mr. Porter's volumes.

THOS. G. JACKSON.

* Vol. 3, p. 30.



THE EDUCATION OF THE ARCHITECT.

Discussion at the Seventh Informal Conference (the third on this subject) held at the Royal Institute of British Architects, 2nd May, 1917.

PROFESSOR W. R. LETHABY [F.] in the Chair.

THE CHAIRMAN: Supposing this was to be the last of our conferences, I have made some notes on one or two things which have been said, but I shall not attempt any full analysis. Some contradictory views may have come out around the fringes of the subjects, but there has been much agreement at the centre.

I ought perhaps to answer one or two direct questions. Mr. Jemmett asks me why I would "concentrate on structural perfection" and why I do not advance to "some theory by which to express ideas . . . the science of aesthetics, psychology and human nature." Now, because I don't think there can be any agreement on aesthetics and human nature so that they can be taught by this Institute, it does not follow that those things do not interest me profoundly. Indeed, it is just because I want a true artistic or human-nature content given to our buildings that I would sweep away the teaching of grandiose bunkum as architectural style. Although good bunkum may be jolly sometimes, I want a due proportion of tenderness, gravity, sweetness, and even dullness. I want the most exquisite poetic beauty, but I don't see how this Institute is to teach how to produce it. Therefore I say train us to practical power, make us great builders and adventurous experimenters, then each of us can supply his own poetry to taste. In fact, looking at Holborn and the Strand as they are, I venture to say it would be a sort of poetry to get rid of sham poetry. One of the most sad wastes of power to which men of good will are subject is vain strife about words, especially when pairs of words have been allowed to come into opposition—as faith and works, art and science. There is really no opposition between art and science. Show me your art, as St. Paul might have said, and I will show you your science. Art is the active side of things, science the contemplative. The most of art is science in operation, and a large part of science is reflection upon art. Properly, only science can be taught, for you cannot teach beyond knowledge, and every fresh activity is a sort of creation. This is art—the works whereby we show our science. It is our false idea that art is a sort of ghost which frightens us off true work. It is just this talk about the styles which leads to—Holborn. I know as well as anybody that conception, style, design are essential requirements in all that men do, from guiding the State to laying out a railway or preaching a sermon, but they cannot be supplied by Act of Parliament or by this Institute. While we have been having these meetings another conference was held, the members of which were eager to assure

Mr. Neville Chamberlain that architects were not to be thought of as hairdressers in the styles but as men of power as practical builders. Individuals, unfortunately, may make their way by claiming to be the priests of mystery architecture and talking tall art to Mrs. Jones, but to do so is a grave injury to the whole body, which must stand on reasonable service. It has, in fact, betrayed us to the caricature of Pecksniff. Then Mr. Weir practically asked me why I joined this Institute. Of course, from many mixed motives. I think (it is so difficult to be quite sure) the main one was that my reading and thinking convinced me that guilds or trades unions were the most constant and proper form of association and that the improvement of all sorts of employments may best be effected through their unions or guilds. I have spoken to workmen's unions on this same view, urging them to think of more than 9½d. Then I have seen that the proper authorities for technical education are the several guilds and the proper centre of activity for this Institute is in education, and I tried to think that in joining this Institute I might share in educational work. Modern architects have to deal with very complex and technical matters, the building on congested sites of great hotels, railway stations, factories, business premises, and the like, and for this it is clear to me there must be highly organised scientific training, even if that training is to be tested by examination. To clear the way of bygones I might say that I should not have objected to examinations in a real educational course, but I still object to any attempt to make a closed profession of architecture. It might, however, be all to the good to create a special class by registration of those who had definite scientific attainments. This little explanation may lead the way to the general question of differentiation of types. More than one of the speakers have referred to the desirability of closer partnerships of diverse gifts. What are the main divisions into which different faculties might run? There seem to me to be about five: (1) the expert constructor and planner, (2) the finisher and furnisher, (3) the expert in old buildings, (4) the man of business, (5) the country builder and general practitioner. There is no sharp distinction, but I think most men gravitate to one or other of these classes or to a combination of two or even three of them, and there is room for high attainment in any one. The first and the last should be the main concern of this Institute. Probably the standard for a time should be that of the general practitioner, but ways must be found to stimulate specialisation beyond

the minimum course—a point to which I shall return in touching on education.

There has been remarkable agreement in the view that this Institute should take up questions of public welfare in matters relating to building more definitely and constantly, that it is called upon to enter on a large constructive policy, and even to engage in earnest propaganda work. In working in the public interest this Institute would incidentally find a worthy place for itself, but, unless we awake, the new cottages, national housing, and town improvements will be done in the main without us.

This Institute does not fill its part as a trade union according to modern conceptions. The trades unions have come to occupy a position in the State, functioning publicly, in collective bargaining and making their wills felt in national life. Whenever and however have we architects been willing or able to make our collective will felt? The administrators of public affairs seem to look on us as city-clerk sort of people out for hire, and if we are ever called in to advise it is usually as a mere screen so that they may the better exercise their own will under cover of "experts." If the experts don't advise just what the organisers want the advice is contemptuously brushed aside. This Institute has to see to it that in matters of public building policy the advice of architects is not only sought but taken. I was told the other day that the architectural bodies in the United States were acquiring almost too much power—nothing could be done "without their interference." Certainly in America there is a growing sense that good building is essential in the great modern State. In regard to this question of public control, I raised the question of the possibility of reviving the Surveyor-Generalship. I have been looking into the origin and suppression of that important office. It appears that Inigo Jones took over part of the functions of the old master-masons to the King, who were the surveyors of royal building works from the early Middle Ages. The Surveyor-Generalship on its new basis continued till 1813, when James Wyatt, the last holder of the office, died. He had been appointed in 1796, when he succeeded Chambers. Wyatt was "Surveyor-General and Comptroller of His Majesty's Office of Works"—that is, I suppose, the Civil Service chief, and what we now call the Permanent Secretary. On some reconstitution the architect was left out. It seems to me that it would be quite reasonable to aim at putting an architect again in control of the Office of Works.

Coming to educational policy, the Institute's business is with civilisation, town improvement, national housing, quality in building, cottage types, the preservation of historical buildings, better public memorials, and a public policy of betterment all round. At present individual architects are at the mercy of vulgar accidents, such as having a flow of dinner-talk, or being in with a business syndicate, or knowing a lord. This Institute has to win a place

for the ablest building directors considered as essential ministers of civilisation, and to see to it that public works are done in a proper way. To do this they must enter on a large and consistent educational policy. We have been educated long enough as purveyors of whims, ecclesiastical and domestic; our education must be recast in the public service.

This Institute should become a centre of stimulating life; we should try to draw together publicists, thinkers, economists, critics, town and trades union officials, and the masters of the City Guilds, in an effort to get something done in bettering our towns: it is not only our duty to lead, it is our business. All our own powers should be reconsidered from the same point of view of a public policy. Our committees need new instructions, our scholarships should be reshaped, and our whole educational requirements need to be penetrated by a spirit of activity. We need an architectural statesmanship in a campaign for civilisation. More and more this powerful body is being left isolated as an architects' remuneration society because it does not come out and teach and do public work. Its proper field of activity is enormous: it is a local society for London, a national society, and a society representing the Commonwealth all in one.

Education needs more than machinery; it needs enthusiasm. We require some literature which should bring the minds of young students into contact with larger ideas than "shop" and the passing of examinations. We should make Wren a patron saint, for Wren was a great Englishman, and in all he did worked for England.

We have, in the liberal prize endowments of this body and in the original essay which forms a part of the matter examined, valuable means for opening up special interests. And here I would say that the essays seem to me to have been a marked success. A fault is that custom compels us to mark poor ones too highly, but they could be improved to almost any extent by rigorously rejecting those which are only compiled from text books. Mr. Innocent says, in the preface to his book on traditional building construction (about the most valuable piece of work which has been published for years) that the line of study was undertaken in connection with the Institute examinations. Mr. Weir reminded us of some excellent thoughts on education, and Sir T. Jackson's idea of a real school of architecture, where the young craftsman, builder, and architect would work together, seemed to me convincing common sense. In the excellent School of Building at Brixton we have, I am glad to suppose, a near approximation to the type, and I was delighted to hear from a speaker at an earlier Conference that the type was to be extended.

MR. HENRY WILSON: What I have sought to do is not so much to lay practical suggestions before you as to attempt to create an atmosphere of sympathy and understanding, understanding of the problem

before us and sympathy with all who are, each in his own way, seeking its solution.

Now for the subject. You will all remember that when Thor went a-fishing with Hymir the Giant his bait was taken at the very first cast by the Mitgard worm, and the god himself was nearly pulled out of the boat. Now, if Professor Thor—I mean Lethaby—has not caught the Mitgard worm, with his bait of architecture and civilisation, it is quite certain that his hook has caught in the very bottom of the Cosmos.

What we are really out to consider, is not whether architecture is a profession or an art or whether it is an art or a fine art—whether the Beaux-Arts system is better than the Academy, or the Central School of Arts and Crafts better than either. We are not even concerned, save incidentally, with the future of the Institute. We are really up against first and last things. The choice of Paris is ours, in more ways than one. We cannot begin to think about the problem of education in any of its phases without asking ourselves: First, what *life* means to us and to our children. Second, what we ask from life for ourselves and for them.

Now it is quite certain that whatever you ask from life, life gives. Realise that every act is a demand and that the sum of actions is character and that character is destiny, and you will see there is no gainsaying the fact that life gives us what we ask.

We say we want better architectural education, cleaner cities, more fruitful lives for all.

Would it not be possible for this Institute to go to the root of things, realise that we cannot even begin to train architects until the foundations of our general education have been properly laid in concrete studies, and realising this take the lead in approaching the Ministry of Education with carefully considered projects of reform and add its great influence and weight to the now general demand?

Would it not be possible to form a special committee to draw up a memorandum on the kind of elementary training needed by those destined for architecture? This memorandum would be signed by all who have the interests, not of their profession alone, nor of the Institute, nor of England even, but who have the interests of the whole world at heart. What we do in the next few years may determine the history and fortunes of humanity for centuries. With a view to the preparation of such a memorandum it might be useful to ask ourselves what are the needs of architecture or building to-day.

They are fairly obvious. For building production we need skilled artificers, using that word in its widest sense; artificers to whom the architect can hand his wishes or instructions, and on whose knowledge, skill and artistry he can rely for the realisation of those instructions. No great building has ever been produced in any other way. Have we got such workmen; if so, are they employed? We can perhaps answer this question later on. What all will admit is that we do now possess in the building trades a large

number of workers whose mechanical skill is of a high order. But we must remember that the completest mechanical skill, the utmost fidelity to detail drawings, will not and cannot produce that sense of organic perfection which we receive from an old building. This is not a thing which time produces, it is the result of organic labour. On the other hand, that sense of organic perfection was often produced with the most limited mechanical means, and very imperfect execution, because the men who did it were working with traditional methods in familiar material, and were giving by those means expression to their own thoughts and vision.

The quality of any work—that indefinable something which shows like a bloom on any building even down to Georgian times—depends on the amount of individual artistry put into it by its producers.

This is not to say that a strong individuality, a genius, cannot produce interesting results by any and every means. Genius can make a machine-made product interesting, but captivation, the uplift, the sudden rapture which collective art unfailingly produces, cannot be captured or conveyed even though genius lavish its most precious gifts in the attempt. Architecture is a communal product. We need these train bands of artificers, led by a careful captain, before vital architecture can come again into being. Moreover, it must be asked for by the community: which means, again, that we must educate and make that community possible.

It is interesting to remember that the choice of the architects and sculptors and painters in Greece was determined by vote at the popular assembly. What would happen if a general assembly of, say, Londoners were asked to decide between the merits of a dozen architects or sculptors to-day? Athens chose Phidias. The Athenian understood workmanship and wanted the best.

It is evident that while we need architectural education we have no less need of educated and trained craftsmen, for the ultimate success of our work depends upon their contribution of life and interest to the whole.

Architects must be better trained in craftsmanship, craftsmen must be trained to help them; the two conditions are inseparable. There must be, that is, more provision for craft teaching, for technical instruction, for elementary workmanship in all our schools. And there must also be more special schools for research in special crafts.

We must not forget that there is no school, no training, no education of hand and soul, like the actual practice of some craft. In shaping real things I believe we are in some mysterious way in contact with the deeper currents of life. We learn things of which we had no conception before. The way one's obedient chisel seems to seek out the form, the feel of the clay or the wax as the shapes emerge, the revelations of texture, the qualities of material, are things which must be experienced to be known.

Men talk, as Butler says, of theoretical knowledge. Yet, as he adds, there is no such thing apart from practical knowledge. If you know the theory of a thing you can do it. If you cannot do it you don't know the theory. There is only one way of learning the theory, and that is by practice of the craft. This surely must be true. If it be true, then the theory of modern building can best be learnt at bench and banker, in the concrete yards and engineers' shops, at the forge and the foundry.

That fact is the corner stone of Ruskin's teaching. It has long been the fashion in some circles to despise Ruskin. The worst were, and are, those who should have understood him best. On the very day he left us, a well-known artist was sitting in his studio. There came a sudden clamour outside, the door burst open and another well-known artist rushed in dancing and frantically waving an evening paper. "Ruskin's dead! Ruskin's dead!" he cried; then, sinking into a chair, "Thank God, Ruskin's dead! Give me a cigarette!"

He was mistaken. Ruskin lives, and that for which he laboured can never die. It began, continues, and will hardly end with the universe. It is neither art nor religion nor beauty, it is not even political economy, but that which underlies them all: the spirit of harmonious creation of rightly co-ordinated communal production in which every man, woman, and child shall have a part. It is the ideal of Morris, of Crane, of Carpenter, of Tolstoi, and will remain the ideal when those great names have been obliterated in the flow of time.

It lay, though imperfectly understood, at the back of the Classic and Gothic revivals, it inspired the pre-Raphaelite movement, and to-day it is the credo of the Arts and Crafts movement which is the heir and successor of all three. All over the country are scattered artists and communities led by those who, having learned their trade by doing it, are now spreading sound ideals, training young craftsmen, even influencing the trend of general education. There is not a live arts school or technical institute in the country which does not owe whatever is vital in its teaching directly or indirectly to the craft revival.

Most important of all, we are providing, slowly, perhaps, but most efficiently, just what was lacking in the previous revivals, the skilled creative craftsman without whose co-operation no real building is possible.

A new generation of workers is growing up: men and women who can both design and make, who understand construction and the right use of materials. Can we not persuade the Institute and all architects to employ them, and to resolve not to put up even the humblest building without finding in that building a place for some form of independent individual craftsmanship? These young workers deserve it, and the resulting architecture would become increasingly deserving as the practice spreads. That is my second practical suggestion.

My third and last is a plea for immediate effort of co-ordination in all branches of artistic and general education. All education should be artistic, for all education should be creative. One of the causes of the present world crisis is that we have isolated working life from education, and both from citizenship. We have failed to see that the real permanent educational force is functional activity. Agriculture, industry, the handicrafts, and all the crafts of the sea, all satisfy the natural human craving to be a productive being.

Their combined result is civilisation and culture, the expression of these two is architecture, for so the whole cosmos hangs together. Touch one, you affect all. Would it not be possible for the Institute, including, as it does, so much of the virile intelligence of the country, to organise conferences as the best means of co-ordinating not merely the educational forces of the country—for example, the Central School of Arts and Crafts, South Kensington, the Academy, and the countless technical institutes which abound—but of bringing into their influence that vast stock of creative ability which gives to England its peculiar elasticity under strain, its superabundant vitality, its daring and resource? The English genius is one of the richest in the world, and might be the richest if we trained instead of suppressing faculty and enterprise. Do we realise that the very men on whom the fate of this country hangs, the men on whom we depend for organisation, are largely men who have escaped the educational mill and who are called either uneducated or self-educated? They are men who have made their respective occupations the path to mental and moral culture. There are other paths to enlightenment, but the path of creative work suits most men and all nations at certain stages of their growth.

This Institute, which represents creative work, is thus in the very forefront of the eternal battle. It has done great work. It will do a far greater if it can realise that the task before it is neither more nor less than the Regeneration of England. And as a ground for future discussion let me end with the divine words of Lao Tzu, written at the end of the sixth century B.C.:—

Faithful words may not be beautiful;
Beautiful words may not be faithful.
Those who love do not quarrel;
Those who quarrel do not love.
Those who know are not learned;
Those who are learned do not know.
That which is weak conquers the strong;
That which is soft conquers the hard.

PROFESSOR BERESFORD PITE [F.]: I would like, first, to refer to Mr. Weir's paper, which was not read last time, but which has been printed, and which I have had the advantage of reading. He raises the very important question which lies at the root of our effectiveness, the question of the examinations conducted by the Institute. Connected with that examination—a controversy which is now old—is the

matter of registration. The first object is to provide the Institute with a test for admission to its membership. The next object of an examination may be that it provides a qualification for an architect. I think I agree with Mr. Weir there at once in declining to admit that the examination conducted by the Institute is an examination to qualify for practice as an architect. I do not admit that those examinations are a qualification for an architect. And then there is the third aspect of the examination: that an examination is a necessary part of an education.

Whether examinations are a mistake altogether, educationally, is another matter. Possibly they are. The Institute examination has, in fact, become an educational programme for the architectural profession, and as such we had better view it and consider it: anything we have to say on that matter will be of practical use to the Institute.

I would point out that the examinations are under revision and that the Board of Architectural Education and the Council have approved certain reforms in the direction of appointing a body of examiners for all the written papers, which will lead to the codification of the written examinations, and, without any doubt, to a continuity and a relation of the subjects one to the other which cannot be obtained under the present voluntary system, whereby a large number of examiners, a panel probably of a dozen, deal with the same student. But for the present the decision as to the examination in design is to be left as it is—that is to say, the designs are to be judged by a committee of examiners.

Any recommendations that we have to make on the subject of the scope of education, though they are addressed to the Examination Board, really ought to be taken careful stock of by the teaching bodies and become the educational programme of the schools and the architectural training depôts. The colleges and the schools have not really conferred together on the subject of architectural education: there has been no considered curriculum. There is need for a programme of education, and very much more for freedom in architectural education than the examination programme provides. The more one studies these programmes the more one is convinced that there is no proper educational doctrine at the back of them. They are more or less accidental, the product of the disconnected minds of the examiners, who, by rule at the present moment, are not teachers, which is perhaps a mistake. An examiner sits down with students, he does not know what the student has been learning, and, as an art expert, asks him questions which he has never really considered.

The system fails because it takes no stock of practical work, the need for which is important. The whole tendency of the examination system has been to cause that to be overlooked. I am not altogether converted to the idea that a man will derive a secret something from positively handling material: that probably varies with personality and character. Some may get

it through the tips of their fingers, through contact with modelling-clay, or through smiting stone or labouring in carpentry. I should be inclined to say, in any case, get contact with practical work, either in workshops or in laboratories, though I prefer building workshops to building laboratories where there is a great tendency to keep on experimenting with the same successful result, reproducing the same problems, whereas in a contractor's workshop the problems are continually varying. This also applies to work under a clerk of works or a building foreman on a long contract, and provides additional training for the architect in many ways.

The doctrine needed for education is a big subject, which has never been thrashed out. Mr. Wilson's paper has been suggestive, but we want an educational idea, an educational truth; a doctrine in architecture which will be as true—and this is a practical point for the Institute—as true in India as it is true in England, and that will open up my mind, as a student, to the meaning of Chinese architecture, as of Mediæval or Greek or Roman architecture. At the present moment our educational outlook is entirely limited; we have no building doctrine which is true all the world over, and until we have that we are not on the threshold of the educational idea.

In doctrine we are practically divided into the Constructive school and the Artistic school. Most of us here dislike the division. . . But the Board of Education has stereotyped it for us in technical institutes and in art institutes, and this Institute accepts in its examination programme building construction subjects, and artistic subjects, on two distinct lines. There are not merely those two sides, but we bring them into combination as best we can in setting students problems both in construction and design. But I do not think that satisfies the case.

There is a third sense, and a third view: that there is an architectural way of looking at buildings which combines instinctively and intuitively the constructive and the artistic. Until we can get at that we are not getting along. I do not think it is got at very easily. We realise it was once so in the mediæval ages, but it is not now in the educational programmes of the Institute or in the schools. We are still face to face with the constructional side and the artistic side, and their combination; but the existence of the architect has been something distinct from both constructor and artist. That is scarcely realised.

I come to the practical question of the prizes offered by the Institute to students. These prizes become in many ways the landmark of the student's ideal. They are very considerable, the Institute disposing of £654 per annum, the Saxon Snell prize being offered triennially, at £60—that is, £20 a year. In addition to that, the Architectural Association, I find, apart from its own class prizes, has travelling studentships amounting to £112 a year. And if we look at the Royal Academy and College of Art National Scholarships in Architecture, three of which are obtainable

for building work, it will be seen that there is plenty of money in existence. It can be borne in mind that as these prizes have not been awarded for three years, and probably will not be awarded for a fourth year, there will be some accumulation of capital which will increase the amount, even, I imagine, in spite of any variation in the product of some of the dividends. There are four prizes for design, three for drawing, two for examinations, and one for an essay. The Soane, Tite and Jarvis are for design, the Godwin is for modern architecture—no work is submitted for that—the Medal is for literary work, and for drawing we have the Owen Jones, a very valuable prize, the Pugin, the Institute Medal, and the Ashpitel and the Cates. With that endowment of £654 a year the Institute ought to do a great deal for education. And I suggest that these prizes should be revised and readjusted, so far as trust deeds allow. Where special purposes, like the Godwin and the Saxon Snell for hospital design, are defined, they can be brought into relation with the educational scheme, for stimulating education as well as for fulfilling the real purpose of the practice of design; and third, creating records of ancient buildings—in this last named, Professor Lethaby has already moved. I think we might ask the Institute to define the prize policy with those objects, redistributing or rearranging the prizes accordingly.

If the Institute will undertake the publication of prize designs annually, we shall obtain an exceedingly important stimulus and a constantly growing ideal for the use of the students in design.

With regard to the record of ancient buildings but little need be said. The Institute has let a lot of water pass under its bridges and has lost a valuable series of measured drawings for which their prizes have been awarded for many years, through never taking the opportunity while they were in the possession of the Institute, of codifying them or asking for copies. Mr. Weir, Mr. Spiers, and friends did good work in collecting some of them for the Spiers Collection at the Victoria and Albert Museum.

I have one other practical suggestion, and that is that the prizes should not all be offered annually. I think if the Soane Medallion were offered triennially there would be enough money to enable a man to get to the East; and until our students go to Greece and Egypt, until they go to Mesopotamia, to India and to China, we shall stick in the rut that we are in now. We are living in an age in which the world is getting bigger, and not smaller.

I am convinced that undirected travelling prizes for students are a mistake. Travelling abroad to sketch and study what happens to be available, is bad; it is beneficial to the man's health, but to nothing else; he must go abroad to do definite work.

My final suggestion is that no prize should be awarded for travel unless it is accompanied by an examination in a foreign language. It need not be confined to Italian, or French, or Greek, or Latin, but one or other is necessary if the student is to travel

abroad with advantage. And that should make us a little more conscious of the enormous wealth that lies at our hand in foreign literature, with which the English architect is, on the whole, but slightly acquainted, and of which our educational programme takes very little cognisance.

I think if this conference to-day were to recommend to the Council to take into consideration the revision and readjustment of its prizes, so as to stimulate, first, education; secondly, the art of design; and thirdly, to constitute a series of records of ancient buildings, it would be, probably, a practical step.

PROFESSOR A. C. DICKIE [A.]: I very heartily associate myself with what Professor Pite has said as it is much on the lines that I have for a long time considered to be applicable in the event of a change being made in the administration of the Institute. To supplement his remarks it may perhaps be useful if I tell the meeting what I find to be the working effect of that administration.

I need not discuss the part-time courses or the evening classes at the Manchester School of Agriculture: these require special consideration. In the graduate courses the University confers degrees of B.A. and B.Sc.Tech. with Honours in Architecture. Each of these is a three years' course, and graduates are exempted from the R.I.B.A. Intermediate Examination. In the first year the student's time is largely taken up with general university subjects, and in the second and third years it is solely devoted to architecture.

At the end of the third year he is expected to produce something up to a standard accepted by architects in general and by those interested in architectural education in particular—whatever that may be. In any case, the standard reached is well ahead of that required by the R.I.B.A., and the standard aimed at is ahead of anything we have any right to expect from a student of a little over two years. As a result he undergoes a sort of "forced feeding." The something so produced exhibits more or less the quality of his "feeding" but does not fairly indicate the degree of nourishment.

This, I fear, is common to all schools, and it may be argued that the fault does not lie with the Institute. But it is inevitable so long as the course is short, and it is short by force of circumstances for which the Institute is mainly responsible. The Institute decrees that a student may sit for his final examination a year after he has graduated. If we could hide the *Kalendar* containing this fact, and keep the student and his parents ignorant of it, there would be advantage to all concerned. The moment it is seen and its possibilities imagined, the master is faced with the difficulty, and in spite of his efforts to press the continuation of study on a definite system, the question becomes "How can I prepare for the Final a year hence?"

However much you may try to find a way out of this difficulty you are, if you hope to keep your

student, forced to abandon your system and become a coach. Every graduate believes he can "get it over" in the time; it appears to him to be the natural course of things, the Institute has said so, and the influence of the regulation is vicious, since it tacitly implies a probability.

It is obvious that there can be no system worthy of the name the value of which can be gauged in three years, and it is here that the Institute unconsciously robs schools of the possibilities of development. To the student it seems to say, "You have finished your preliminary studies, you must now prepare for our examination; we do not entrust your school with the test, the higher branches are beyond it." Not only to the student does this appear to be so; it is, in fact, what is clearly implied. And so the spine is broken, a new line is followed, a changed attitude makes for anxiety and hurry, and to these he readily surrenders; it would be a miracle if it were otherwise. I believe this to be destructive of all education—(hear, hear)—and until some alteration is made there can be no progress: there is no possible chance of it.

Schools, by the aid of post-graduate scholarships, can retain a few of their advanced students, but the small number thus netted is not worth talking about. No school can be built up in this way. If the object of the Institute is to encourage education, the first step it must take is to allow schools the freedom to develop. We want it rather to aid us in impressing upon the public the necessity for a more extended course of study and to exhibit clear evidence of its confidence in the institutions entrusted with that study.

I suggest that a student of the type I have mentioned should not be allowed to take his Final until at least two years after he has graduated, and that the regulations should be altered so that he may find it expedient to continue his studies along the lines on which they have so far been carried. To make this possible the examination must be conducted by the school, coming as a culmination of the extended course. From the point of view of supervision, there ought not to be any serious difficulty to this, since the Institute exercises a veto on the appointment of the external examiner, and so holds a finger on the pulse of the standard.

If the suggestion were adopted we could keep our students and the value of a course could be tested, the test reacting on the system. As it is now, our work is shot over a precipice in the student's scurry after a door-plate, that pseudo evidence for finality which we have all in our time accepted.

The question immediately arises as to whether the examination should follow the type of the present one, or whether certain elements should be abandoned in favour of a broader and more general test. Like most other examinations, it includes just as much of everything as can be packed into the time, and values are smothered in the crush. It is obvious at this stage, or indeed at any stage, that examinations cannot claim

more than to briefly enquire, and in this case the enquiry does not presume to bring under consideration the question of absolute competence. It is not necessary, therefore, that every branch essential to practice should be enquired into. Much good would accrue from the deletion of the minor parts so as to make room for the more thorough handling of the major part. Looked at broadly, it ought to be possible to formulate with good effect an examination within the confines of construction and design which, in all conscience, could be made difficult enough. The passing of such a test would carry the stamp of high attainment forever valuable to the architecture of the country.

There are endless items of knowledge absolutely essential to the practising architect with which no examinations can cope, or, shall I say, with which endless examinations might cope. In the present selection of subjects there is a good deal that appears to be a tradition from the days when examinations were to a great extent taken by architects in practice and senior assistants. For such, at that time, something in the nature of an all-round test of ability to practise in some kind of a way, rather than a comprehensive test in construction and design, was perhaps appropriate. The conditions are now changed, and with the rise of educational facilities in the shape of departments in universities, technical schools, etc., there must come a modification to meet the call of more methodical and effective studentship. In the early stages of studentship particularly it is that which produces the evidence rather than the exhibit itself which is vital. In time this becomes apparent, but unfortunately, in these days judgment goes by the minute.

The governing *personnel* of the R.I.B.A. is far too busy with other things to have time for effective administration in architectural education; although the attempt is sincere there need be no surprise at its failure. What we again ask of the Institute is to consider the lily it would grow—its nature, its soil, and what is here most loudly calling, its fertiliser.

Professor Pite made suggestions as to the question of readjusting the whole prize list of the Institute. When I first went to Manchester we had something similar to the present London system—of course, on a much smaller scale—controlled by the Manchester Society of Architects. After some discussion, that Society most generously and in a very public-spirited manner abandoned the system and allocated their funds as school prizes and scholarships for a whole session's work or for three years' work, in order the more effectively to support education on definite lines.

Another matter which I should like to bring before the meeting is the question of the education of craftsmen, the courses for which are solely undertaken by the School of Technology. The first great difficulty lies in the fact that in many cases the men who take the trouble to be educated do so having in view, as the

ultimate result of their education, the abandonment of personally practising their craft. In this way they hope to better their position. This is a difficulty which, having regard to the present order of things, appears to be almost insurmountable, and it is here that the spirit of Mr. Wilson's remarks on the broader question of education have special significance.

As regards the system of group courses which extend over periods of three or five years, the result is unsatisfactory as attendances diminish, particularly after the third year, out of all proportion to sober apprehension. The co-ordination of technical school courses and the consequent facilities for continuing these courses at different centres are unable to cope with the leakage.

The whole question is surrounded with difficulties, and demands the most careful consideration. Much depends upon the spirit of the times. Mr. Wilson's object is the regeneration of that spirit, and with that, I think, we all agree. The duty of those directly in touch with architectural education is, however, first of all, to ventilate the difficulties which a spirit less complex and, I hope, more immediately responsive has gratuitously imposed upon architecture. By making choice it can materially affect Mr. Wilson's greater ideal which awaits a greater fullness of which architecture is but a part.

Mr. ROBERT ATKINSON: I wish to refer to one or two questions that were raised by Professor Pite. He thinks the Institute system should be revised, and I quite agree. One point that I believe to be wrong is the age limit for these competitions. A man ought to be above instead of under a certain age before he can enter. Three years ago the English Prix de Rome was won by a man of nineteen. No man of nineteen can possibly have sufficient knowledge of architecture to make any use whatever of his visit to Italy or other place abroad. ["Question."] A complete course in architecture should be taken before he is allowed to compete for a prize. Mr. Jemmett suggested some time ago that only men who had passed their Final Examination should take a Studentship. Professor Dickie says there is not enough time between a man entering at the age of eighteen or nineteen and his twenty-first year to prepare properly for the Final Examination. It would be better if the age limit were raised to twenty-five: he would then have time for six or seven years' study.

Mr. C. FITZROY DOLL [F.]: I am glad of this opportunity, which has never presented itself before, to express my disappointment at the attitude taken up by this Institute some years ago, when I made an effort, I may say a promising one, to get a Faculty of Architecture created in the University of Cambridge. When my eldest son, who has since earned distinction as an archaeologist, first went up to Cambridge, I saw my old friend the Dean of Trinity and told him that my son was destined to become an architect, and asked

him what opportunity there was at Cambridge for him to learn something that would be of value to him in his profession. In a few weeks he wrote me a triumphant letter saying that he had found a man in the University who taught Building Construction and Drawing at the Mechanics' Institute who would be glad to give my son some teaching in drawing. It incensed me to such an extent that our profession should be treated in that way that I at once set to work with some of the dons at Cambridge to get a Faculty of Architecture created at the University. Having worked out a plan for the Faculty, the promoters asked the Institute to send three members to consult with them. This was done, but the Institute did not do me the honour to send me as one, to the surprise of the advocates of the scheme at Cambridge. However, the delegates crabbled the whole matter to such an extent that the only result achieved was that facilities were given to fourth-year men to take a course in architecture and obtain a certificate, which was to run with the "Preliminary" or "Intermediate"—I am not sure which. My third son, after he had taken his Cambridge degree in Classics, was the first to take the certificate. After hearing what Professor Pite said, I think that as an Empire we take much too small a view of the question of architectural education. He speaks of prizes aggregating £654 a year. It ought to be thousands, and it ought to be given by the Government. How do you think the Germans have got their hold on Greece? How have they got their influence in Asia Minor? Undoubtedly through their Schools of Architecture. My son went to the British School at Athens, to which our Government gives a paltry sum of £500 a year. It was thanks to Mr. Balfour that they got even that. The Germans gave £25,000 a year. They have created a School at Smyrna, and a School at Aleppo, and through their students in those places they wield a great influence there, an influence which we are feeling throughout this war. As soon as the war broke out the whole of the English students were bowed out of the British School at Athens, but the Germans remained there, and are there now with the Allies. This is a matter which ought to be taken up by the Government; we ought as an Institute to approach the Government, and insist on their providing proper funds for the advantage of students of architecture.

Another question I feel strongly about is that of the raw material. What does the Institute do to see that the men entering for their examination tests as members of the Institute are men of culture? Every student ought to know at least two languages besides his own before he goes travelling. Another thing I would like to see introduced is the prohibition of cameras to students, so that every man who goes travelling abroad, or in this country, should do what I had to do, and took a delight in doing, and that is, get up at the first streak of daylight and measure buildings and their details, and stick to it until it is dark. Nowadays when young men see a beautiful

building they simply go to the nearest shop and buy a picture postcard of it and then rush on to the next place.

MR. S. B. CAULFIELD [F.]: There are many things we disagree about, but we want to find the points on which we agree. There has been a good deal of talk about science and art, and it seems we must realise that everything which comes under our human industries can be divided, roughly, into two groups—one science, the other art. We speak of the “artistic temperament,” of the “scientific mind.” That, I think, is suggestive of the way in which we regard things in general: we think there are two distinct groups. And yet the biggest artists have generally been big scientists as well, and a big scientific man must be to some extent an artist. If we look at the great men of the past we realise why. And it has become the custom for the rank and file to think that they cannot possibly rise to such heights: they can only take in part of the thing, instead of dealing with it as a whole. The reason of that is not so much due to the limitation of the man’s mind, but to the system of education which he receives. We know, of course, that architects will often have some scientific knowledge or appreciation, but we do not often think of engineers as having much artistic inspiration: they rather pride themselves on being practical men, which means, generally, Philistines. Two personal matters I have come across to the contrary might be interesting. One, an engineer friend of mine, who was a painter in his spare time, told me when he was designing anything, if he came across a form of a member which was not pleasing to him, after he had made the calculations—a point at which most engineers would be satisfied—he would go through it again and sketch it, and nearly every time he found he could improve that member by revising his calculations. The other was a remarkable letter from an engineer in Manchester, in which the writer advised engineers to study architecture, not in order that they should be able to produce a Tower Bridge, but so that they might know what to leave out.

With regard to our education, I think the main point should be that every school of architecture should not be a thing apart, but a part of a school of building, in which the students, according to their capacity, at any rate in the early stages of their training, should work with the other students. We want a much increased knowledge on such a subject as mechanics. The difficulty is, we feel that the man who has not the scientific mind is afraid of mechanics, he dreads it as a mysterious formula. He seldom has any choice: he has not been shown how interesting it could be by being worked out in this form. Long ago, an architect or master-builder had his training on the building, and he learned very much from a building which we cannot learn to-day, partly because our methods have changed and partly because architecture has become such a much more elaborate concern. But

I think if in its place we were to study more mechanics, going deeply into it and realising it is not a mysterious formula, we should feel its relation to the facts. And it could be introduced into the Institute examinations and could be worked out as part of the design in correlation with the examiners. We cannot work in the way our forefathers did, and we are apt to fall into the way of being mere shopkeepers, of having the test of precedent, and so on. We produce our designs; they may be beautiful, but we get no further. We can see that directly we come up against anything like concrete or steel: we only use our “taste” and historic knowledge like that: we cannot do anything for ourselves. A man with a thorough knowledge of mechanics, and learning to apply it to his other work, would be more adventurous if he had also a knowledge of materials, which he could get on buildings and in the laboratory. These would give him the courage to know that anything he wanted to do, though it might at first appear to be ugly, is not necessarily bad. Another trouble is, I think, as Professor Lethaby said, that our great danger is to regard these various things as subjects apart. That is the difficulty, and a correlation of examiners would get rid of it to some degree. Emerson, in an introduction to a new edition of Plutarch’s *Morals*, said of the author: “His natural history is that of a lover and poet, and not of a physicist.” This should help us to agree about the teaching of science. We must help our students to realise that design, history, mechanics and so on are not only inseparable parts of our work, but that the study and practice of architecture, big as they are, can be only a part of a big free life.

MR. ARTHUR T. BOLTON [F.]: I do not feel that I can add to what has been said, but there is one point about the Surveyor-Generalship in the eighteenth century, the restoration of which has been advocated here. It was not so satisfactory as you might suppose, and the actual appointment was largely due to the King. There is a curious letter from George III. to Lord North, in which he says, “With regard to the desire of Mr. Adam to have this appointment, I should feel it very much if Chambers were to be passed over.” Chambers had been the King’s tutor in architecture before he came to the throne, and owed this appointment to the influence of the King, as well as his position of Treasurer at the Royal Academy. But I am far from thinking it was good for Chambers or for architecture. Those who have studied Chambers know that he did very little work. Apart from Somerset House and one or two houses rather similar in design, he did astonishingly little for a man with his apparent opportunity. It has struck me that this may have been largely due to the fact that he was too much occupied with official appointments, and also that he wasted himself in Academy politics, in regard to which he was largely attacked in lampoons of the period. When he died in 1795 he was succeeded by James Wyatt—we are

sitting in a Wyatt room now*—and I think the result was even more unfortunate, because Wyatt came into collision with Soane over the Houses of Parliament. Soane was architect to the department of the Royal Palaces, and he had a definite commission in 1794 to make plans and designs for work at the Houses of Parliament. Wyatt, being Surveyor-General, thought he ought to have the work caused by the Union of 1800, and succeeded in obstructing Soane, who did not succeed in building his remarkable Royal staircase—which no longer exists—until Wyatt died in 1813. Wyatt added some horrible stuff to the Houses of Parliament in what he called "the National style," which was the cause of their eventual destruction, for it was Wyatt's lath-and-plaster additions which took fire, as Soane had predicted. The appointment of the Surveyor-General was abolished because it had been found so unsatisfactory. Wyatt came into collision with other architects over it, as I have seen a very curt letter to Robert Mylne at St. Paul's, setting him aside over some work. Perhaps we did not lose very much by the office being done away with. The King's influence was on the wrong side and the wrong man, as he patronised West in the days of Gainsborough and Reynolds, and in architecture he completely overlooked Robert Adam and other architects as good or better than Chambers.

THE CHAIRMAN: These are extremely interesting minor points, but one needs to separate the two sides of that question. One can understand that official duties might injure the good nature of a given great architect, but that does not touch the point of administration of public works. That is the sense in which something like a revival of the Surveyor-Generalship is necessary. Can Mr. Burridge tell us what the County Council is doing in the way of architectural education?

MR. FRED V. BURRIDGE, Principal of the Central School of Arts and Crafts: I was very interested that Mr. Caulfield raised the point as to structural mechanics. It is materially concerned with the question, which has been debated, as to the scientific side and the artistic side of the subject. Speaking from the point of view that I hold in connection with the Central School, I do trust that this Institute of British Architects will consider architecture as a craft in the development of which science and art are necessarily related.

You should set out to convince administrators of education that in architecture science and art are bound up together. I had an instance of the necessity for this not long ago, when it was a question whether, being a school of artistic craft, the Central School should have anything to do with building construction or structural mechanics in the teaching of architecture. The tendency to put things into water-tight compartments prevents that relation of all the crafts which is

vital. I hope that in the development of architectural education it will be considered necessary that architecture should be studied in relation to the other crafts. I was in Liverpool at the time when Professor Simpson was making that very interesting—and up to then, I think, unique—effort to build up a school of architecture and allied crafts, and the success of the experiment was such as to justify entirely the opinion held by everybody who agrees with the association of architecture with the crafts. It is much to be regretted that the effort finally broke down and the school of architecture was separated from the school of art and crafts.

I venture to suggest that something might be done by this Institute to secure that in the art schools which undertake the teaching of architecture there should be developed courses leading up to advanced work in other schools, which might be the centres of areas, instead of having architectural courses run at all sorts of schools and not related in any definite scheme. I am entirely in accord with the views which have been expressed by the Chairman and Professor Pite at the last two meetings on this subject, and in the great ideal which Mr. Wilson holds with regard to architecture and general education.

MR. H. V. LANCHESTER: I would like to come back for a moment to the broader issues which were claimed in such an interesting way by Mr. Wilson, and I suggest that any resolution we submit to the Council should be put on broad lines, somewhat as follows: "That the opinions expressed at these three Conferences on Education be carefully considered by the Council of the Institute in view of any future reorganisation of their programme of education and examination." I think that will cover the ground, and prevent our missing out anything. All the views which have been expressed will be in print, and they can be put in a definite way before the bodies charged with the question of education. I myself feel that the whole question is a much broader one than are these details. Many of us here are dissatisfied with the present form of the examinations, and what has been said at these meetings will give us plenty of hints and suggestions as to how the examinations might be handled in the future. No one has framed a definite programme: it is for the Institute to see if a definite programme cannot be framed on the vital ideas which have been put before us. I would like to endorse the view that has been expressed, that our educational system is altogether wrong: very little of it is right, from the cradle upwards. We have to do the best we can with it, and if we can influence educationalists outside professional bodies let us try to do so, we shall then get the material as it drifts into the technical branches, and we shall get the right material instead of having to patch up men who have been badly trained until they came to us. Another thing: We are a little bit inclined, I think, to take too narrow a view as to what the qualifications

* The R.I.B.A. Council Room.

are. A knowledge of science and a knowledge of two languages have been insisted upon. Do we not realise that civilisation means variety of gifts? One man may not be a craftsman, after the ideal of Mr. Wilson; another man may not be good at languages; we want the man who is vital, to educate and use him in the most vital way. Therefore we should keep our minds as broad as possible, and see that the men we get are men who have vitality in any direction which is suitable to the craft of architecture.

THE CHAIRMAN: I think Mr. Lanchester's proposed motion does not traverse Professor Pite's position. It is absolutely definite and clear, and has been seconded, and if Professor Pite will read it, we can get it out of the way.

PROFESSOR PITE read the Resolution as follows:—That this Conference recommends to the Council to take into consideration the revision and readjustment of the R.I.B.A. Prizes with the view of stimulating—(1) Education; (2) the art of design by publishing an adequate record of progress in students' designs; (3) the production of records of ancient buildings.

The resolution was put to the meeting and carried unanimously.

PROFESSOR PITE: If this is a Conference it has served its purpose, because I would remind Professor Dickie that he is a collaborating member of the Board of Architectural Education, with Mr. Lanchester himself and Mr. Atkinson. Professor Dickie's point as to the continuance of the Manchester course two years beyond the Intermediate is most important. Mr. Atkinson's point, that the Final should not be taken until 25 years of age, must be fought for. The Institute Examinations, as at present run, work like this: As soon as a boy leaves school and is passed as a Probationer of this Institute by a school-leaving certificate, he begins to prepare his Final Examination Testimonies of Study. He does it at the schools in the country, and the Board in London have refused to stop it. I am glad to have got Mr. Atkinson as an ally, for the first time, as he was on the other side.

Mr. Lanchester's resolution was then put, and carried unanimously.

PROFESSOR PITE: The Board of Education have issued a very important Memorandum with regard to the teaching of building construction in technical institutes.* It would not be proper for me to state an opinion, but it provides a very valuable and important programme for education in building construction. Architecture is specifically excluded as being a professional subject, and I point out that the programme, consequently, does not bring across the view of the building student the relation of building practice to

design: or rather it does not bring crafts in relation to the study of form to that of handicrafts. I think the Institute should consider that, as it goes rather to the root of things. I merely draw attention to the fact that there is the Memorandum, a sort of Code for the technical institutes for some time to come, that should be weighed by the Council. We could draw the attention of the Council to it, and ask them to consider it and communicate their views on the subject, which would be very valuable.

THE CHAIRMAN: What has been said will be printed, and I hope that will be enough.

MR. HUGH DAVIES: I may say, on behalf of the Board of Education, that I am sure the Board will welcome any suggestions which come from this Institute.

CITIZENSHIP.

Mr. G. A. HUMPHREYS [F.], of Llandudno, writes:—*A propos* of the discussion which took place at the Conference at the Institute (as reported in the JOURNAL for August), and the resolution moved by Mr. Halsey Ricardo on education in the duties of citizenship in relation to the amenities of our towns and cities, possibly the following précis of evidence with respect to a proposed special scheme of liberal University study, based on the idea of Citizenship, at the University College of North Wales, may interest members:—

In the memorandum submitted by the Council of the College in November a statement was included of the additions to the teaching staff in the Faculty of Arts deemed necessary for the strengthening and developing of this side of the work of the College. To the detailed proposals, drawn up with reference to the actual needs of the several departments, a statement of general policy was added. It was explained that, in making its recommendations, the Council had had in view the desirability of further emphasising the more definitely humanistic side of the subjects included in the Arts curriculum and the need of cultivating a more intelligent appreciation of national life, especially in view of the large number of students who subsequently become ministers of religion or teachers. In further development of the views there expressed, the College now submits to the Commission proposals for a special scheme of liberal study in the Faculty of Arts, the adoption of which would be rendered immediately possible by the additions to staff which have been asked for, and in particular by the establishment of a department of Economics and the appointment of independent lecturers in the subjects of Ethical and Political Philosophy and Modern History. In order fully to carry out the scheme in the department of French, some further assistance beyond that indicated in the Council memorandum would be required, in view of the special nature of the course to be provided and the probable number of students.

The scheme was framed in the first instance with a view to the special needs of Pass students, but the College authorities consider that a valuable Honours Course could be framed on similar lines, and it is their intention to proceed with the construction of such a course.

The time of Pass students is at present too largely spent, both in this and in other Universities, in acquiring or further perfecting by linguistic and other means certain instruments of learning and culture, the value and applica-

* See reference to this Memorandum in Mr. Hugh Davies's remarks at the first Conference on Education, JOURNAL for March, pp. 108-9.

tion of which their otherwise too limited studies give them but little opportunity of ever realising, while their work as a whole is apt to appear to them to possess no very close or obvious bearing upon life. On the other hand, a student entering upon the proposed special scheme of study would from the outset have his attention directed mainly to ideas of a formative character, and his course as a whole would be constructed with a view to giving him an insight into the life of the society in which he has to play a part, a knowledge of the nature and conditions of social progress and the inspiration of a social ideal.

To attain this end specially adapted courses would be provided in the literatures of this and other countries, apart from philological or other linguistic studies. A two years' course of general historical study, with special reference to more recent times, would be followed by all students. In the second University year students would be introduced to the direct study of social life, its ethical implications and economic basis, by means of a two years' course in Ethical and Political Philosophy and a one year's course in Economics. For the success of such a scheme of study it would be essential that in all these subjects considerable attention should be given to the writing of essays and to individual tutorial work. While, as will be seen, the scheme as a whole may be said to centre round the idea of citizenship, it would not afford training in any of the technical forms of public service, for which it is proposed to offer special facilities at Aberystwyth.

It is believed that the proposed scheme of study would prove specially suitable for the following classes of students and would be taken by them in considerable numbers:

1. Students in the Teachers' Training Department.
2. Students preparing for the ministry who do not propose to specialise in Greek or Hebrew.
3. Students of maturer years not proceeding to College direct from school. This class should include some of the ablest members of Tutorial Classes, in particular those preparing to take charge of such classes or contemplating other similar work.

The following are suggestions for a scheme of study for a Pass degree, based on the existing nine-course Degree scheme in the Faculty of Arts.

The scheme embraces—

- (a) Ethical and Political Philosophy. (A two years' course to be taken in the second and third years.)
- (b) Economics. (A one year course to be taken in the second or third year.)
- (c) Modern History, with special reference to the nineteenth century. (A two years' course to be taken in the first and second or second and third years. Students taking Latin under (e) below, may take a course in Roman Imperial History in place of the first year's course in Modern History.)
- (d) English Literature. (To be taken in the first year.)
- (e) Another Literature. (To be taken in the first year.)
- (f) A Science or Mathematics. (To be taken in the first year.)
- (g) A second year course in (d) or in the subject taken under (e) [or in both].

Before entering upon the course students must have qualified in the subject of Latin at Matriculation. Special provision would have to be made to meet the case of the maturer students referred to above—e.g., account might be taken of their work in Tutorial Classes.

It may be well to illustrate by a typical case the actual working of the scheme:

First Year.

- Modern History (1).
- English Literature (1).
- Welsh Literature or French Literature (1).
- Chemistry.

Second Year.

- Modern History (2).
- English Literature (2).
- Ethical and Political Philosophy (1).

Third Year.

- Ethical and Political Philosophy (2).
- Economics.

AMERICAN CITY PLANNING.

The American Institute of Architects recently issued a most interesting volume on *City Planning Progress*, 1917, which gives in attractive form an admirably illustrated summary of what is being done by American architects and others in connection with City Planning in hundreds of towns all over the United States. The interest taken in the subject of city planning by public and professional men in America is emphasised by the valuable contributions on various phases of the subject which have recently been published in America. One of the most interesting is *The Planning of the Modern City*, by Nelson P. Lewis (Chapman & Hall, Ltd., 16s. 6d. net). The book is intended for engineers and is frankly written from the engineer's point of view, and it is perhaps for this very reason that it will be found interesting to the architect, though its scope is rigidly limited by the author to the engineering sides of the problem.

As Engineer to the Board of Estimate and Apportionment of New York City, Mr. Lewis is intimately acquainted with American municipal practice, and his analysis of American city planning is one that sums up the ideals of city planning as seen by the enlightened American municipal engineer. To him the problem of city planning divides itself into (1) Transit; (2) Streets; (3) Parks and recreation; (4) Location of public buildings. He somewhat strangely omits from the summary such important considerations as topography, water and drainage, and touches but very lightly on the necessities of business and industries. All the rest, architecture, housing, social amenities, are to him mere trimmings or details of administration forming no part of the city plan, and it is by no means clear that he intends to provide for the future of these all-important things.

This line of thought running through the book seems, however, at variance with the author's own definition, in which he says: "City planning is simply the exercise of such foresight as will promote the orderly and sightly development of a city and its environs along rational lines, with due regard for health, amenity and convenience, and for its commercial and industrial advancement." *Orderly and sightly development*. No "high falutin'" words there, no talk of inspiration of the people or the soul of the city, but plain, matter-of-fact business, which, whether intended or not, indicates to some extent the reaction of the American business man's feeling. Mr. Lewis says (p. 23), referring to the ideals of the average city planner: "Beauty has heretofore been his chief aim

as was clearly shown by the frequent use of the term 'The City Beautiful,' which was formerly so much in evidence, but which happily is now more seldom heard." It behoves the architect to look to these matters with a discerning eye before accepting these conclusions.

There is, however, a tone of gentle banter in the book which makes it highly readable. Speaking of the skyscrapers of New York, he says: "When the tall buildings were first erected in American cities, they were declared to be monstrosities, not only by visitors from abroad, but by most Americans. The architects, except those who were fortunate enough to secure commissions to design one or more of them, were especially offended, as they were held to violate the most sacred architectural traditions. As the character of their design improved and some really beautiful effects were produced the American architects were still severely critical, and it was not until foreigners began to admit that many of these buildings were really beautiful that Americans began to realise that they had produced something which was admirable." A useful digest is given of the various national aspects in town planning, together with some shrewd criticisms on the faults of German municipal administration and the shortcomings of European and American practice. One learns by others' mistakes, but best of all by one's own!

The author puts his finger on the weak spot when he says (p. 52): "American cities, generally, have little power of initiative. Legislative action is commonly required to permit them to do constructive work themselves or to enable them properly to control improvements undertaken by others." Mr. Lewis need not have confined his remarks to his own country. It is a remarkable commentary on democratic communities all the world over, that little or nothing is done until the reins of Government fall into the hands of a strong man who can lead his fellows to the realisation of his ideals. In the multitude of counsellors there may be safety, but there is frequently confusion, and continuity of policy in municipal matters is hardly possible with ever-changing elected bodies.

In city planning matters American cities have frequently had recourse to an expert, or a commission of experts. Such a body of experts, responsible directly to the Mayor, as head of the City Council, but with sufficient security of tenure to enable them to take an independent outlook on the problem, is one of the most hopeful solutions of this difficulty.

There is another point upon which all who have given attention to the problem of town development look with interest. In growing communities the land values in the outskirts steadily rise with the growth of the city and the need for building land, and many reformers in all lands have cast longing eyes on this "unearned increment." In most English towns this increased value is the bait which attracts the specu-

lating builder. On the Continent there are many towns, such as Ulm and Stuttgart, which have themselves acquired the larger portion of the building land available, so that the town is a co-partner in all building enterprise. Mr. Lewis is a firm believer in this principle. There are, however, in the United States, as with us, legal difficulties in the way of municipal purchase on a large scale, and it is possible that a system by which the municipality and the owner shared the increase might answer the same purpose. In practice, however, it must be evident that the community, as ground landlord, has a larger share of control, and possibly initiative, than it is likely to have merely as a sleeping partner sharing the profits.

Mr. Lewis gives some very interesting and up-to-date information in respect to schemes for docks and railroads now in hand in various parts of the American Continent. The system under which great extensions are now being made to the electric railways, both overhead railways and subways, in and around New York, is also of special interest in considering the problem of London traffic. Some £65,000,000 are being spent in extending these electric railways, of which sum the city of New York contributes about one-half and the two railway companies operating the present lines the other half. The building of new "rapid transit" lines has in the past been confined to the parts of the city where the present population was sufficiently dense to make the undertaking a paying one. Under the present plans new lines are being carried out into open land which is still undeveloped. The effect of this policy upon rateable values and land values will be very great. There may be a depreciation in certain congested districts where the present values are unduly high, but the increased values in the outer districts will much more than compensate for this, and the city will correspondingly benefit. At present there are 296 miles of track (elevated or subway). When the proposed extensions are completed there will be 620 miles of track in the various electric railways.

Mr. Lewis touches upon a number of weaknesses in the rigid rectangular plan of the typical American city. One of the most telling objections is the fact that the size and depth of building plots is almost certainly standardised—for instance, in New York the standard depth of plot is stated to be 100 feet, with a frontage of 20 or 25 feet. The width varies in different parts of the city, but the depth of 100 feet is almost invariable, whether the lot is situated in a commercial, manufacturing or residential district, and whether it is a millionaire's mansion or an artisan's tenement. The rich man can, of course, buy several plots, but the workman who desires a cheap home suffers a serious handicap, hence possibly the prevalence of the tenement house.

The steady drift of the population into the cities and other large centres all the world over is a point that cannot too often be driven home. In 1820 only one

person in twenty in the United States lived in a town community (having over 8,000 people). In 1900 this had increased to very nearly one in three, and the urban population of the country is increasing at a rate more than three times that of the rural population. In European countries this movement towards the crowded industrial centres is still more strongly marked, especially in the last few decades. Something may be possible to stem this tide of town dwellers, but in the meantime the architects and builders of our modern cities are in Mr. Lewis's words "confronted with problems which are not only highly technical, but are unsurpassed in their intensely human interest."

W. R. DAVIDGE [A.].

REVIEWS.

OTTERY ST. MARY.

The Collegiate Church of Ottery St. Mary. With plans, photographs, introduction and notes. By J. N. Dalton, Canon of Windsor. Quarto. Cambridge University Press. 1917. 25s. net.

Canon Dalton has produced a monograph of much value on this great western minster built "in honore domini nostri Ihesu Christi et beate Marie virginis gloriose matris sue, Sancti Edwardi, Confessoris et omnium Sanctorum, apud Otery Sancte Marie." It comprises an introduction of 80 pages, which is mainly taken up with a minute architectural description of the exterior and interior of the church, and an annotated reprint of the statutes of the college. The statutes are those given by Bishop Grandisson to his church in 1338 and 1339, and are contained in a manuscript volume bound up with the statutes of Crediton, another Devonshire church, a list of obits at Ottery St. Mary, a collection of literary jokes, recipes for cooking, making inks, stained glass, etc., and a number of medical receipts. The volume is now in the Exeter Cathedral library, and appears to have belonged to John Exeter, who became canon and prebend of Crediton in 1429 and canon of Ottery in 1436, and who retained both preferments till his death in 1448. The only other known copy of Grandisson's statutes is an *édition de luxe*, also in manuscript, in Winchester Cathedral library, probably given by Grandisson to Bishop Edingdon of Winchester for use in drawing up the statutes of the collegiate churches of St. George, Windsor, and St. Stephen, Westminster, by command of Edward III. Edingdon was Bishop of Winchester from 1346 to 1366. The bulk of Canon Dalton's large volume is devoted to the Ottery statutes, to which he has appended copious notes and explanatory matter; this is by far the most valuable part of his work and deserves unreserved praise. We could wish, however, that he had given us also an English translation of the statutes; it is not every English

layman who is familiar with the ecclesiastical Latin of the fourteenth century.

The church, with its collegiate buildings, which, as at Wimborne, Ripon and Beverley, have almost wholly disappeared, was built for secular canons, mainly between 1337 and 1342. Thus it compares with Bishop Grandisson's work in Exeter nave, which was completed by him between 1329 and 1369. At Exeter, however, the Bishop was but completing the design set out by his predecessors, Bishops Bronescombe, Quivil, Bitton and Stapledon, the last of whom had already built the easternmost bay of the nave. At Ottery Bishop Grandisson had a free hand. It is remarkable that he took so little advantage of the opportunity to design his church *de novo*. But the fact is that, though he had been very unwilling to leave the Papal court at Avignon and his Burgundian relatives at Lausanne, Geneva, Basle, Toul, and Verdun, he had been Bishop of Exeter eight years when he began to build at Ottery, and had come to recognise that in the interior of his new cathedral he had a masterpiece unsurpassed in Christendom. "When it is finished," he says in one of his letters, "it will be marvellously beautiful; 'Ecclesia Exon, fere ad medium constructa, mirabili si perficiatur pulchritudine renitebit.'" It was doubtless because of his admiration for his cathedral that in plan his collegiate church is a reduced copy of it. Both churches are remarkable for their bilateral symmetry: in each the nave has the same number of bays as the chancel; each has a low flanking chapel on either side of the chancel aisles; the planning of the ambulatory and Lady chapel is similar; the Lady chapel is a reduced copy of that at Exeter; both churches have the towers at the end of the transepts instead of over the crossing or at the west end; and Exeter formerly had the low timber spire over the northern tower which is still to be seen at Ottery. It follows that, since the Ottery church was built on the lines of Exeter Cathedral, a correct account of the latter is of great importance for the elucidation of the design of the former. Canon Dalton, however, has been misled by Archdeacon Freeman's history of the cathedral; and thus is led to speak of lancet windows at Ottery as derivative from imaginary lancet windows in an Exeter Lady chapel, and of the transepts of Exeter as having been transformed by Bishops Marshall and Quivil instead of by Bishops Bronescombe and Quivil, and those of Ottery as being partly Bishop Bronescombe's work instead of wholly Bishop Grandisson's. What has also misled him is that all Grandisson's windows at Ottery are lancets, or, as he terms them, "Early English." Being "Early English," some of them, at any rate those of the chancel aisles, must, he asserts on page 16, be the aisle windows of an earlier church which is known to have been consecrated by Bishop Bronescombe in 1259. But it is quite clear from the mouldings, as was pointed out long ago by Mr. Street, that, though lancets, none of the windows are thirteenth

century work; they are as plainly work of the fourteenth century as the pillars and arches and clerestories and vaults of the interior are admitted by everybody to be. The fact is that untracery lancets are by no means always work of the thirteenth century; as the Canon admits on page 14, they occur in many west country churches of the middle of the fourteenth century both in Devon and Cornwall. That the lancets of the chancel aisles are part of the original church of Bishop Bronescombe consecrated in 1259 is therefore by no means to be accepted without architectural evidence, which, as we have said, points the other way. It is just the absence of window tracery which gives Ottery its "austerity of design." The reason for it is not far to seek. We might have expected to see reproduced at Ottery in 1337 the elaborate tracery windows of Exeter Cathedral, especially the curvilinear tracery of Grandisson's nave. But such tracery has grave disadvantages. The glass with which it is filled cuts enormously to waste in the tracery lights; which may be the reason why Grandisson filled his nave windows at Exeter with cheap English glass instead of the expensive glass from Rouen which had been employed by his predecessors in the chancel. By making the fourteenth century windows lancets at Ottery, as at Milton Abbey, Wimborne Minster and elsewhere in the west country, the task of the glazier would be immensely facilitated, each lancet light probably being filled with a single canopied saint. That is how we should think of the noble interior of Ottery, as being environed, aisles and clerestories alike, with a hierarchy of saints in the rich stained glass of the fourteenth century. But, even if any of the lancets of the chancel aisles are of the thirteenth century, certainly the eastern ones are not; for they look into the two eastern bays of the chancel, which on this supposition was five bays long when the church was merely a parish church. For similar reasons we cannot accept the assumption, for which the evidence is very weak, that the lower stories of the transepts are thirteenth century work and formed part of Bishop Bronescombe's church. Is it likely that the parish church consecrated in 1259 would have both transepts and a chancel five bays long? You might find them in the church of a great and wealthy town, like Holy Trinity, Hull, but hardly in a little rural town like Ottery, which even now has only 2,540 inhabitants.

It is hardly likely that Grandisson had fully completed this great church in five years (1337-1342); some parts, *e.g.*, the vestries and treasury, Lady chapel and the west bays of the nave, look like additions; they would be of but little later date, however, not later than his death in 1369; for he was of a great and wealthy family, and his see one of the richest in England. When he had finished, it was a church with a parochial nave and with the north tower parochial also and containing its own peal of five bells; the crossing transepts belonged to the canons. There

was a screen between the nave and the crossing, and another between the crossing and the choir; both have been removed. It may well have been felt by the canons that they were cramped by the parishioners' occupation of the nave, which would be wanted for the canons' processions, which, including the boys, were forty strong. At any rate, a broad aisle was added on the north side of Grandisson's north nave aisle, between 1505 and 1530, contemporary with the work at St. George's, Windsor, which it resembles in detail, and was provided with a vaulted north porch, the door of which still goes by the name of the "dead door" from its use in parochial funerals. As this doorway was parochial and the seating of the aisle, much of which survives, and the north tower were parochial also, it is quite possible that at this period, built apparently with the aid of funds provided by the Marchioness of Dorset, the Dorset aisle, as it is called, was, as Canon Dalton suggests, not a chantry chapel, but a parochial aisle with its own altar at its east end till it was opened up into the north transept, probably in post-Reformation days. Thus in the sixteenth century the nave and its aisles would be left in the sole occupation of the canons. We may compare the case of the Benedictine church of Leominster, whose great parochial aisles were added to the south of the monks' nave. The addition or the enlargement of parochial naves happened in many conventual churches. The parochial aisle would be added to the north of Ottery nave because the cloister, chapter house, library and gatehouse of the Canons were on the south side of the nave.

FRANCIS BOND [*Hon. A.*].

Books and Pamphlets Received.

- George Edmund Street. *Unpublished Notes and Reprinted Papers, with an Essay by Georgiana Goddard King.* 80. 1916. 11s. 6d. (Publications of the Hispanic Society of America, No. 100.) [G. P. Putnam's Sons, 24 Bedford Street, Strand.]
- Experimental Building Science. Vol. I. By J. Leask Watson, B.Sc. (Cambridge Technical Series.) 80. Cantab. 1917. 6s. net. [Cambridge University Press.]
- South-Indian Images of Gods and Goddesses. By K. Krishna Sastra, B.A. [Madras Government Press.]
- A Record of a Mediaeval House which until 1916 stood on the Bayle, Folkestone. By W. H. Elgar. [F. J. Parsons, Ltd., Herald Office, The Bayle, Folkestone.]
- Some Notes on St. Mary's Church, Hull. By John Bilson, F.S.A. Pamph. (Reprinted from the Yorkshire Archaeological Journal, Vol. XXIV.)
- Beverley Minster: Some Stray Notes. By John Bilson. Pamph. (Reprinted from the Yorkshire Archaeological Journal.)
- A Short History of the Port of Belfast. By J. D. Owen, Secretary to the Belfast Harbour Commissioners. 80. Belfast, 1917. [Mayne, Boyd & Son, Ltd., Belfast.]
- Archives de la Commission des Monuments Historiques: Catalogue des Relevés, Dessins et Aquarelles, dressé par A. Perrault-Dabot, Archiviste de la Commission. 80. Paris, 1899. [Imprimerie Nationale, Paris.]
- Yearbook of the Pittsburgh Architectural Club. (40. Pittsburgh, 1917.) Published in connection with the Eleventh Annual Exhibition, which chiefly illustrated by drawings and photographs the series of important school buildings of various types recently carried out by the Board of Public Education of Pittsburgh, Pennsylvania. A selection of the designs, with photographs of the executed works, is reproduced in the Annual.



9 CONDUIT STREET, LONDON, W., 22nd Sept. 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-seventh List.

Fallen in the War.

- FLOWER, Lieut.-Colonel VICTOR AUGUSTINE, D.S.O., London Regiment [*Licentiate*]. Killed in action on 5th August.
- HOUSTON, 2nd Lieut. WILLIAM WYLIE, Royal Engineers [*Associate*, 1913]. Killed in action in France on 17th August.
- MEIKLEHAM, Lance-Corporal DAVID LANG, Royal Engineers [*Associate*, 1912]. Killed in action.
- WILSON, 2nd Lieut. JOHN HARDY, Sherwood Foresters [*Licentiate*]. Killed in action in France on 7th April. Aged thirty-three.
- WRAY, 2nd Lieut. ERNEST WARNEFORD, Royal Engineers [*R.I.B.A. Measured Drawings Medallist*, 1909]. Killed in action on 23rd August.
- O'BRIEN, EDWARD, R.A.M.C. [*Licentiate*]. Died on service.

Members' Sons.

- SILCOCK, 2nd Lieut. PERCY BRYAN, Cheshire Regiment. Died of wounds received in action in France on 11th August. Son of Mr. S. P. Silcock [*F.*], of Warrington.
- TUBBS, Captain SEYMOUR BURNELL, Gloucester Regiment. Killed in action on 22nd August. Second son of Mr. Percy B. Tubbs [*F.*].

Military Honours.

- ROSENTHAL, Brigadier-General CHARLES [*Associate*, 1904], of Sydney, N.S.W., who joined the Australian Imperial Force in August 1914, has been three times wounded and three times mentioned in Despatches, and has been awarded C.B. and C.M.G.
- RIDLEY, Captain BASIL WHITE, South Lancs Regiment [*Associate*, 1917]: awarded the Military Cross "for conspicuous gallantry and devotion to duty in carrying out daring reconnaissances during an attack. He obtained and sent back valuable information at a time when communication was exceedingly difficult, and he showed exceptional coolness and initiative under fire."
- LEITH, Lieut. GORDON, R.F.A. [*Associate*]: awarded the Military Cross.

TRISCOTT, 2nd Lieut. HARRIS STEPHENS, R.E. [*Associate*], has been awarded a bar to the Military Cross conferred upon him in June last. The *Gazette* says: In spite of incessant enemy sniping at close range, he exposed himself fearlessly in reorganising one of his parties that had suffered severely by shell fire, thus completing the task of wiring in front of our newly established advanced posts. He set a splendid example of determination and devotion to duty.

Serving with the Forces.

Intimation has been received that the following members are serving, bringing the total to 76 Fellows, 526 Associates, 327 Licentiates, and 297 Students:—

ASSOCIATES.

Edwards, S. J. (of Singapore): 2nd Lieut., I.A.R.O., Royal Engineers.
Wickenden, Arthur F.: R.N.A.S.
Ramsey, Stanley C.: Lieut., R.N.V.R.

LICENTIATES.

Madgin, A. J.: 2nd Lieut., A.S.C.
Lewis, P. S.: Royal Engineers.
Lead, E. A.: R.N.A.S.
Payne, E. H.: R.F.C.
Warde, W. J.: R.N.A.S.
Exley-Fisher, Thomas: 2nd Lieut., Durham Light Infantry.

Promotions.

Hitch, J. O. B. [*A.*], Artists' Rifles, to 2nd Lieut., London Regiment.
Wright, Osborn [*Licentiate*], to 2nd Lieut., A.S.C.
Grote, Lieut. A. L. [*Licentiate*], to Capt., Inland Water Transport, R.E.

Housing of the Working Classes.

An important proposal has been made to the Institute by the Local Government Board in connection with the scheme for the housing of the working classes. This involves the grant of a sum of money for the purpose of obtaining, under the direction of the R.I.B.A., the best plans for working-class houses, and a committee is now considering the details of the proposal, in the carrying out of which it is hoped to secure the co-operation of the Allied Societies.

The Proposed National War Museum.

The following letter has been addressed from the Institute to the Prime Minister:—

14th September, 1917.

SIR,—The Council of the Royal Institute of British Architects has noted the announcements in the press respecting the proposed National War Museum, a project which, as outlined, promises to be the most important ever undertaken in this country, and one which should command the highest architectural qualities of which the Empire is capable.

The Council is deeply impressed with the great importance of the work and the opportunities which it will afford for a National and Imperial monument worthy of the events which it will commemorate; and wishes, therefore, respectfully to suggest that when the time comes for considering the means by which a suit-

able design may be secured it may be decided that the most desirable procedure will be by a public competition amongst the architects of the whole Empire.

The Council of the Royal Institute of British Architects would be prepared to co-operate and assist in the organization of such a competition if called upon to do so, and would be pleased to send a deputation to lay before you its views if thought desirable.—We are, Sir, Your most obedient Servants,

HENRY T. HARE, *President.*

E. GUY DAWBER, *Hon. Secretary.*

The R.I.B.A. Galleries Requisitioned.

The Army Council have requisitioned the Galleries, known as the Maddox Street Galleries, forming part of the Institute premises and situated at the rear of No. 9 Conduit Street. The Galleries are required as temporary quarters for the excess staff of the Canadian Forestry Corps, which is closely connected with the Home-Grown Timber Department of the Board of Trade. The Civic Survey which has had the use of the Galleries during the past two years are now accommodated in the Common Room.

Council Appointments to Standing Committees.

The following appointments to the Standing Committees have been made by the Council under By-law 51:

ART.—Messrs. J. J. Joass, Harry Redfern, John W. Simpson, Harry Sirr, Walter Tapper.

LITERATURE.—Sir John Burnet, R.S.A., LL.D., Messrs. J. D. Craze, H. M. Fletcher, H. G. Ibberson, Brook Kitchin.

PRACTICE.—Messrs. F. A. Powell, Herbert A. Satchell, H. A. Saul, W. Henry White, Wm. Woodward.

SCIENCE.—Messrs. H. W. Burrows, C. A. Daubney, Bernard Dicksee, J. E. Franck, W. Jacques.

Cambridge University School of Architecture.

Professor Edward S. Prior [F.] in the last issue of the JOURNAL called attention to the facilities for research in building science which are being provided by Cambridge University in connection with its Architectural School. Advanced students are recommended to take advantage of the arrangements the University is making for the equipment of research and experiment in (1) the Materials, (2) the Processes, and (3) the Administrations of Buildings. Professor Prior will be pleased to give information to anyone who may wish to treat such questions experimentally in the interests of British art and science.

Australia and Town Planning.

Arrangements have been made for an Australian Town Planning Conference and exhibition to be held in Adelaide during October. Questions of national interest affecting town planning will be discussed, having particular reference to Australia and civic art, the future of Australian cities, and the Federal Capital; whilst as regards the New South Wales section, papers will be read treating of the problems of Greater Sydney and New South Wales, in relation to municipal town-planning control and administration, the transit

problems of Greater Sydney, and the principles of civic design applied to Greater Sydney.

Sydney, N.S.W., Open Spaces.

Mr. John Sulman [F.] has been successful in his public-spirited opposition to the recent proposal of the New South Wales Government to encroach upon the "Domain" for the erection of an extension of Sydney Hospital. The Domain is the largest open space in the centre of Sydney and, as Mr. Sulman has pointed out, there are several alternative sites available for the needs of the hospital. It is satisfactory to note that the Premier, Mr. W. A. Holman, and his Government have now undertaken that no further encroachments upon this public open space will be permitted. Both Mr. Sulman and the New South Wales Government are to be congratulated on this result.

THE EXAMINATIONS.

Licentiates and the Fellowship.

The following Licentiates have passed the Examinations qualifying for candidature as Fellows:—

HARVEY: WILLIAM ALEXANDER, 5 Bennetts Hill, Birmingham.

JONES: FRANCIS, 178 Oxford Road, Manchester.

JONES: GERALD E., Security Buildings, Queen Street, Auckland, N.Z.

MORRISH: WILLIAM JAMES MARMADUKE, Wyke Road, Gillingham, Dorset.

POWELL: ROBERT SIDNEY, 11 St. Mark's Square, Regent's Park, N.W.

RUTHEN: CHARLES TAMLIN, H.M. Office of Works, Storey's Gate, S.W.

NOTICES.

The R.I.B.A. Statutory Examinations.

Examinations for Certificates of Competency to act as District Surveyor under the London Building Act, 1894, and as Building Surveyor under Local Acts and Authorities, will be held in London on 24th, 25th, and 26th October 1917. Applications must be sent in to the Secretary R.I.B.A. on or before the 10th October.

New Supplement to Kalendar 1915-16.

Instead of the usual *Kalendar* it has been decided to issue a Supplement to the *Kalendar* of 1915-16 on the lines of that issued last year, but containing lists of new members and changes of address during the past two years. Members who have not already notified their changes of address are requested to be good enough to do so not later than the 15th October.

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CO-OPERATION IN DESIGN.

Discussion at the Eighth Informal Conference held at the Royal Institute of British Architects, 16th May 1917.

Mr. ALFRED W. S. CROSS, M.A.Cantab. [F.], in the Chair.

Mr. A. R. JEMMETT [F.] read the following Paper:—

The proceedings of this Conference, indeed the very existence of this Institute, may be taken as evidence that we recognise the advantages of co-operation, but I suggest that our somewhat half-hearted co-operative action has hitherto been directed more towards safeguarding our material and professional interests than to widening our mental horizon and quickening our spiritual perception. The principle of intelligent co-operation between those concerned in actual building operations—between the architect and the decorator, the architect and the craftsman—is now fully recognised; but the way in which this principle should be put into practice appears to be a question on which there is more to be said. I hope it will be said by those better qualified than I am to say it.

This is one aspect of co-operation, and a very important one; but that to which I would draw attention is the need for closer and fuller co-operation between architects themselves during the conception and development of their designs before building co-operation has a chance to begin. More particularly would I point to the immense value of a real spirit of co-operation and mutual assistance; to its widening effect on the mental outlook, its stimulating effect on the imagination, and its general tendency towards raising the standard of architecture and the repute of those who practise it. I submit that the possibilities of this form of co-operation have not been sufficiently explored. This may be partly due to racial characteristics, and partly to the fact that we are just emerging from a period of unrestricted individualism in design, and may be still susceptible to its influence. During this period genius dwelt apart, and wrought in splendid isolation, jealously guarding its trade secrets, as deeds of apprenticeship testify. Each designer was a law unto himself. Everyone went his own way simply because it was his own way, indifferent, apparently, to his destination, and priding himself on the fact that, whatever else his work might or might not be, at least it was his own. "A poor ill-favoured thing, sir, but mine own." The mere fact that it was entirely "mine

own" down to the last cupboard-door handle or case-ment fastener was evidently considered ample excuse, or even justification, for its poverty and ill-favour. Each man for himself and the devil take the hindmost adopted as a rule of artistic conduct created an atmosphere of mutual jealousy and veiled hostility in which it was actually possible to refuse to publish one's drawings for fear that others might learn something from them. So was knowledge spread and architecture advanced.

The perverted morality of this golden rule need not detain us. Obviously the devil would take the foremost, not the hindmost, by any ethical standard conceivable now. What concerns us, however, is the lack of intelligence that failed to perceive that we are all members of the same body, and cannot flourish individually unless the whole body flourishes collectively, and that if we fail to support the body we ourselves must ultimately perish. It concerns us because we are faced with the result, the inevitable reaction of the lowered vitality of the ill-nourished body upon the health of its individual members.

Granted that we now breathe a more congenial atmosphere, and that a more enlightened self-interest has taught us that we can best serve our own interests by serving those of the body to which we belong, that the more we give the more we receive; but are we yet fully persuaded that isolation is mental and spiritual starvation, and that the quality of a design is of more importance than its authorship?

To those who still hold the opinion that each man's design is, and must be, entirely his own this question of co-operation may present some difficulty. The mere idea of a collective concept, or of co-operating to produce a concept, may suggest a paradox or a contradiction in terms. I think it is March Philipps who points out that architecture is the most intellectualised of all the arts. If, bearing this in mind, and accepting the view that it is also a communal product expressing certain aspects of communal life, we examine the nature of our work, the conditions under which it is carried out, and the mental processes involved, the difficulty may, perhaps, disappear. We

may even arrive at the conclusion that no man's design ever is, or can be, entirely his own, or, to be more precise, that no architectural design ever is, or can be, the outcome of a single mind.

We have to remember that, although under the impulse to create we may all visualise castles in the air, yet that as a matter of fact such personal mental concepts rarely materialise. It may be possible to suddenly create, to visualise instantaneously, and straight away to go and build just the one building that can express the mood of the moment—it may be possible, but the point is, we don't do it. We do not get the chance. We may have the impulse and the vision, but not the opportunity. A procedure allowed to the poet or the musician is denied to the architect. He can only design the buildings that other people require, and when they require them. He finds his opportunity for self-expression limited by the fact that both the impulse to build, the nature of the building and the germ of the idea for its design originate with those who need the building, not with those who build it; as well as by the further fact that accommodation, site, cost, and so forth, are all predetermined and presented to him as factors in a problem he is called upon to solve. Regarding our work from this point of view—the solution of a given predetermined problem—we may be disposed to admit that co-operation in its solution is possible.

There may be buildings so small and so simple that the solution of any problem they present is obvious, but there are others so large and so complex that it can only be arrived at slowly by analysis leading to synthesis, a process of gradually building up or evolving a mental concept which must be not only complete in itself but the one that presents the right solution of the particular problem in hand. When we consider the nature and the amount of the preliminary analytic work required before we are in a position to proceed to a synthesis; the danger of a premature synthesis, under pressure of the time limit; the number of possible solutions that present themselves, and the amount of judgment required to choose between them, we may be prepared to admit that co-operation is not only possible but desirable. Indeed, when we further consider the rapid advance of knowledge, the growing complexity of society, the increase of the factors with which we have to deal, the new problems involved in the tendency to build ever larger and more complex buildings, to bring groups of buildings, and even whole towns, within the scope of a single architectural synthesis; when we realise, in short, that architecture is an art that is only in its infancy, we may be willing to admit that co-operation is not only desirable but necessary—if only by way of division of labour.

The practical advantages of division of labour are obvious. Considerable progress has been made, particularly in America, by the association—in partnership or otherwise—of men of different aptitudes, each

of whom specialises on his own branch of the problem, but I am more interested for the moment in those who combine to study every aspect of the problem together, and to produce a joint solution. When two or three are gathered together, sharing the same mental outlook or attitude towards their art, and work together to the same ends, they mutually strengthen, stimulate and inspire one another, and personalities seem to mingle, melt and fuse into a something greater than any one of them, a collective personality—the personality of the group. This joint personality appears able to produce a complete mental concept—a joint solution of the problem which is not that of any one member of the group, which is different from that which any one member would have produced alone, and which, in my view, may be, should be, and generally is, better than that which any one member could have produced alone. A design embodying such a concept seems to reflect the collective personality of the group, not the individuality of any one person, and to be governed by a dominating idea, not by a dominant mind.

This suggestion of a collective personality may appear fantastic and quite unnecessary to those who hold that a design must be the outcome of a single mind. They may prefer to take the view that any such group of men is sure to be dominated by one individual, the real creator of the design, to whom the others are really assistants; and that any improvement in the quality of the design would be due to their influence, which seems to point to the value of assistance, provided it is co-operative.

We never seem to have considered how far our work may be simplified and its quality improved by sympathetic and intelligent co-operative assistance. We do not know how to use our assistants. If we do not exploit them we still continue to regard them too much as draughtsmen, or even as clerks, and too little as assistant designers. Instead of taking them into our confidence, opening our minds to them and discussing the problem with them as man to man—recognising that our greater experience may be our only claim to lead—instead of using them to help us to analyse the programme, study the various factors of the problem, examine the potentialities of various possible solutions, and generally assist us in clarifying and arranging our ideas and arriving at our general concept of the scheme, we bring them in as draughtsmen when the general outline of the scheme is completed and the chance for co-operative assistance is passed. I wonder if we quite realise how much we lose by this procedure, and how much the younger generation loses. The study of completed results may be advantageous to the student, but it is not the same thing as watching and taking part in the mental processes whereby they are obtained. The assistant, either as ghost or as draughtsman, must disappear, and be replaced by the assistant architect, trained in the schools to co-operate, if we are to pass on our knowledge, build up a tradition of method, and arrive at

that general mental outlook in common so necessary to the advancement of architecture.

Possibly this brings us to the real reason why we do not co-operate more often. Not because we will not, but because we cannot, because we have no traditional method of working and no mental outlook common to us all. We cannot walk together cheering and sustaining one another by the way, because we walk in different ways. Small groups, perhaps, go the same way—possibly arm in arm, co-operating as they go—but these groups have not yet agreed on any one way in which they can all walk together. This way must be found, even if we all have to modify our views, and trust less to our own unaided sense of direction in order to find it; for it is the way of progress by co-operation in design.

THE CHAIRMAN: Mr. Jemmett has given us much food for reflection. I think the position he takes up as to architects sharing the same mental attitude to produce the same mental concept, as he describes it, is unattainable unless, to begin with, architects are educated together. What I think an ideal education for an architect is for his preliminary training to be received in common with the preliminary art training of the painter and the sculptor. If Alfred Stevens is right in the assertion that there is only one Art, you do not want to have separate educational establishments; and until the student, whether he be architect or painter or sculptor, is in a position to begin specialising in his own work, I think you will only get that same mental attitude. Mr. Jemmett's remarks as to the divergent road taken by architects will apply much more strongly to the divergent road taken by painters and sculptors educated in a different direction. You would only get that unity in the Arts if you educated your embryonic artists, to a certain point, together. In a school of that kind you would have an interchange of ideas when the men are young. It is extremely difficult, as far as my limited experience goes, to work really comfortably and profitably with a man you have never met before in your life, a man whose ideas may coincide with your own or be diametrically opposed to them. Supposing, for instance, you had occasion to call in the services of a sculptor, or a decorative artist, you would naturally call in the man of whose training and sympathies you knew something. It is rarely that you get to know a man, his character and idiosyncrasies when you come to know him only late in life. Early youth is the time for forming friendships: at that period there would be mutual criticism: the sculptor would criticise the architect's designs, and the young architect would criticise the sculptor's work, and the painter would criticise both. I think this interchange of ideas would be a most valuable system in education, for it would encourage the viewing of things from different standpoints. Therefore the preliminary training of all men in the artistic profession should, it seems to me, be a sort of joint one. Of course, Mr. Jemmett has more than

once laid stress on the difficulties of architects themselves, those who have been brought up in different schools of thought finding it difficult to co-operate. I think that is very true. Surely some day there will be a great Government School of National Art, subsidised by the State, perhaps, but not necessarily, for I think it ought not to be directed by the State, as far as the curriculum of study is concerned. Something on the lines of the *Ecole des Beaux-Arts* is desirable here. There the students of the first two years work together: each has to attend the same classes, and they are all imbued with the same ideas, and that, I think, is productive, on the whole, of a good result.

MR. H. V. LANCHESTER [F.]: The only qualification I feel I have for speaking this afternoon is the fact that I am one of those architects who have worked persistently in collaboration with others. There are men here who perhaps share with me that qualification. I have only gone in that direction to a very limited extent compared with the possibilities in the future. In so far as I have pursued that course, I feel that both myself and those with whom I have worked have benefited very greatly: in getting our outlook broadened, in conceiving larger general principles of design, thus making up, in some degree, for the limitations of what I regard as a very unsatisfactory education, which I think we all admit to have had in the past. I do feel that there is considerably better hope for us in the future—and, I trust, in the near future—with regard to preliminary training in our art. I think a good deal of confusion exists with regard to art training. I would like to state the point of view which was put to me, comparatively recently, by M. Horta, who was over here, and who was given control of the *Beaux-Arts* School in Brussels. "I do not pretend," he said, "to try to teach people an art. What I want to do—and I like to begin with children of about four or five years of age—is to teach them to observe, to see everything, and to see it thoroughly, to see everything there is about it. Those who grow up seeing everything there is to be seen, if they have got any artistic quality in them at all, it is bound to come out." We know that when M. Horta had that school under his control he insisted that his pupils and those who were working with him should see things absolutely. He began with the simplest thing, for the young you must begin with simple things. He began with a pea, and asked what there was to see about it. Somebody said it was round. Then he rolled it along, and asked, "Is it round?" Then the pupils began to look at it more closely, and found it was not round, that it had various subtleties of shape. Later he took them to the growth of plants, and asked them what they could see: how they grow, their connections, the shape of the leaves, the veining, and so on. Then he passed to animals, and from them to the human form: how the muscles are half hidden and half revealed by the skin and tissues. Finally he

said: "If they have got any art in them they can now develop it." It may strike you as an extreme view. But it brings out the beginnings of an understanding on the basis of which a man can build up his art. It seems to me, however, that when he has got some way on that programme the architect has to go a great deal further. He has, as Mr. Jemmett said, the communal basis of his work to consider, its function, its mixture. It has, underlying it, some sort of utilitarian purpose. I mean "utilitarian" in the broadest sense: it has to express that purpose in a beautiful way and in a rational way. When we come to these things it becomes, to most of us—because we have been trained in this haphazard way—a very difficult task. We worry, and say, "I know there is something at the back of this, but how is it to be expressed?" I candidly admit that, in one's excursions into these things, nine times out of ten one arrives at the conclusion that one is off the track. Sometimes one has even put it into brick and stone, and only then realises it is off the track. I think if we can get that first observation and train one's ideas of beauty, and subsequently of logic, and train one's ideas of expressing need, we shall much less frequently get off the track than we have been in the habit of doing. If we had this preliminary study on such lines as that we should instinctively come together and be able to see things more or less in the same way, much more so than we have been in the habit of doing. The sort of training we have had disorganises everything. I am particularly thinking of our competitions and things of that sort. If you look into the average competition in England, you see that in nine cases out of ten the designs have gone off the track, and the only result to hope for would be to pick out a design which is less off the track than most of the others, and hope that the man who did it possesses the logic and the faculty of getting nearer to a solution than the others and when he carries out the work that he will be able to get a little nearer still. If we had that basis of knowledge as to how these functions were to be logically and beautifully expressed we should be able to see much better what our fellow artists were driving at, and we should have a consensus of opinion as to how the thing had arrived at the right solution. If we had that education we should be able to gain much more from the co-operation which Mr. Jemmett suggests than under our present methods. But I believe that even with our present defective faculties—and I think we must all recognise that our faculties, through lack of exercise in our youth, are defective—we shall be able to gain something by co-operation with each other with regard to design, particularly with regard to our interpretation of the expression of needs into terms of beauty. I have always felt that myself. I have always felt that criticism from the man whose opinion and training I have valued has never failed to pick out some weakness. I do not say the remedy he proposes is usually the remedy I should choose myself, but it has nearly always proved to me that

there is a weakness somewhere which has to be gone into and rectified.

Another advantage that I can see in such a system of co-operation would be a definite continuity in tradition. We see too often that our best men seem to leave no school behind them. There may perhaps have been one or two men working with them who have benefited by their brilliance and their highly trained intellect. But supposing those best men got men, who were more or less sympathetic with their attitude, in close contact and working steadily with them, and that every new comer was most carefully chosen as one who was sympathetic in his method, it seems to me we might expect to see continuity from generation to generation, the carrying on of a very high tradition. We should then, as it were, organise our work, so as to get the best out of the men at our disposal, and so get better work all round.

PROFESSOR LETHABY [F.]: I feel great sympathy with Mr. Jemmett's paper, and also with Mr. Lanchester's delightfully modest speech—a modesty which I would like to share, if I could. Of course, what I may call "group sympathy"—and the bigger the group becomes, the better—is an enormous thing. All productive work can only properly, I think, come from what you may call group sympathy: I mean in any school of literature, or any new movement in painting, or that sort of thing. But Mr. Jemmett seemed to suggest a little more than that: he suggested a sort of Committee Architecture. That, it seems to me, is nearly impracticable. There might be a discussion, certainly, on equal grounds, but it seems to me there must be a captain of the ship. And what I have called Committee Architecture, apart from group sympathy—a thing which is of absolute value—seems to me impossible. But the co-operation on the other plan which he mentioned—namely, the association of divers gifts—seems to me to be most practical, and most necessary now in relation to big complex building problems. I hope I make that clear.

That is really all I have to say on the main question. It is one line of necessary growth—a great and essential thing, I feel sure; and until we get more into the habit of real association in producing big works we shall not move very far or do very much. I am sure that is one line of advance. I agree, so far, entirely.

If I may now make a little cavilling personal note, I would say we are getting to talk a new cant language: this talk about a "concept," "a solution of the problem," "expression in terms of beauty," and such things, which sound awfully well. But, first of all, it is difficult for an ordinary person to know what is meant; and, secondly, what does it all amount to? I do not care if a thing has a conception; my street is full of conceptions; we should prefer common-sense. I do not know of any modern building in which this wonderful "expression in terms of beauty" justifies itself—what are "terms of beauty"? Therefore why do we confuse ourselves with this grand and unreal

language? The people who do the work of the world—doctors, scientific men, engineers and so on—do not talk language of that sort, and it is time we should drop it. Until we do we are only again building up artificialities which may betray us.

Mr. LANCHESTER: If I may speak again, Sir, the expressions Professor Lethaby refers to may be considered *clichés*, but there is something which it is a little difficult to convey in other words. I think what we want to say is that there are certain things which seem lacking in the English handling of architectural problems, compared with the Continental handling. One of them is this—and that is really at the root of what I want to say—that we fail, relatively, in putting into concrete form the expression of a purpose and intention in a building. And it has appeared—rightly or wrongly—that in some of the Continental schools they have, more or less, given their students a lead in the methods, the short-cuts, as it were, to get this expression into the character of the plan, the massing and the general treatment of their building. When we compare British building with Continental building in those respects—let us leave out all the other things that we do not like and that we think are frivolous and unbeautiful about Continental buildings, and get down to the broad things—we find they have the sort of feeling which should come into the mind of people when they are occupied in and about such a building. They do seem to have got, in some way, a sort of system of expressing, by the disposition of the component parts of a building, the character of the building. We recognise it, perhaps, in the case of our churches, a certain restraint and dignity about them; but we do not seem to have recognised it in many of our other public buildings. We see a building down the street, but we cannot tell until we meet the Curator that it is a museum: we see another building, but we do not know what is its purpose until we get inside it. There is a stage in a man's career when he must begin to realise that he must think first what the function of the building is, before he attempts his design, to make that building an excuse for an architectural conception. What I mean, I know Mr. Jemmett will put into better language than I have.

Mr. ROBERT ATKINSON [F.]: I am very much interested in Mr. Jemmett's Paper. I think on exactly the same lines, but there are a few small details on which I differ. I was very much interested, too, in Professor Lethaby's discussion on sympathy. He talked about group sympathy, which I am very pleased to hear he agrees with, because a very few years ago group sympathy seemed to be scorned and sat upon because it was not individual. People seemed to think that if everybody was turned out of the same mould, the same school, individualisation would be killed. Apparently, that idea seems to have died a natural death, and now we think it is an advantage that people should think in the same direc-

tion. And in that direction would come co-operation. It could not be avoided, because people would all think more or less in the same way, and would think the same things beautiful. I am not sure I like the idea of a Committee of Architecture, as Professor Lethaby says, because here you would have a group of men, perhaps working and walking in the same direction; but some of them are jealous, and one or two of them must be dominant. Rather than not be dominant, they might not put out their best work. So in a Committee of Architecture you might not get the best work, though in theory you ought to. Then there is the word "expression," which I often use myself. It seems to me that that combines all the functions of architecture: its use, its construction, and everything else. It seems to me beauty is merely the measure of the man who looks at it. A person who understands these things looking at a fine building would see in it beauties which even the designer did not intend. It is, perhaps, a question of education along certain lines, and it is only visible to architects: the man-in-the-street is not capable of forming an opinion upon the subtleties themselves: the differences between a warehouse and a store, and so on. To the architect, however, they will be perfectly apparent.

Turning to individualism, which I think is now dead, very recently individualism was a thing which ran mad: every person seemed to think he could not be individual unless he had an individual, a peculiar, style as well. We see Colcutt doing Plateresque, and Norman Shaw doing Tudor, and someone else doing Dutch gables, and there was an idea that no one else must do it. If in those days some tradesman went and asked five or six architects for a building, and each gave him their style, they could not all be solutions of the poor tradesman's problem, and so he would have to live during the rest of his life in a building which externally looked Gothic, or something else, but did not fit his requirements. I think the beginning of a design must be from the inside, from the tradesman's point of view: if it does not fit his shop or his millinery business, it is a useless piece of architecture. But, as I have said, I am glad that is dying out: we are now getting more at any rate on level lines, and trying to get more expression than individualism.

And I think that, after all, we come back to the root of the problem, and that is education, because co-operation must be fostered by education: that is really where it would begin: it is where its origin comes. And I might say, as a young architect, that we feel very strongly that we ought not to be bound by any State schools, or London County Council regulations. We want to be architects and work our own education and our own salvation. We do not want to be State-subsidised at all. We do not want to be ordered about and work under hide-bound restrictions, because that would kill architecture in a very short period. I think that the more the architect's educa-

tion expands, the more co-operation we shall get, because these men will see each other in the schools, and will know each other's capacities. They will form friendships, and the friendships will be as much friendships of admiration as are friendships in the ordinary way, such things will naturally bring co-operation. Thus, eventually, practically everybody will be working on the same lines, and architecture will become a national style, instead of an individualistic one.

MR. D. B. NIVEN [F.]: I think we are rather too much inclined to work in water-tight compartments as architects: we do not come sufficiently into contact with painters and sculptors and other artistic people, or even in contact with our clients as much as we should do. We have our own ideas, and, too often, I fear, force them down our clients' throats. If we were more in touch with life—and after the war we must be more in touch with life—we would benefit all round. If these conferences are to be continued would it not be possible to get painters and sculptors to attend them as well as architects. The series of conferences have been excellent, and they have been doing a great deal of good in a quiet way. Co-operation is in the air: everyone should co-operate or combine in the future more than formerly. It is not merely a case of working in partnership. In America they have gone in for co-operation more than we have here, and in that country you find architects combining with engineers, and even with lawyers. Of course, in London it is immensely difficult to do work, and it would be a good thing if sometimes an architect had a lawyer as a partner to steer him clear of some of the pitfalls. In fact, only after an architect has worked all round the subject, and found what are the limitations and difficulties, can he start with his design; and then he is so hampered, and has had the stuffing so knocked out of him, that it is difficult to do anything. The manufacturers in this country are, I know, thinking a good deal about co-operation: they realise that business cannot be conducted in the future in the same way as formerly, and they are already finding out how best they can combine. Mr. Lloyd George recently told some of the Labour people they must have audacity; that everything was possible in the future. The world is in a state of flux, and many things we have been almost afraid to suggest will be considered and will be perfectly possible hereafter. Co-operation, however, is sometimes a compromise. When two men are working together, and they consult one another, and are both men of strong ideas, it is not always a source of strength, sometimes it is a source of weakness: there is a levelling-up, but there is also a levelling-down. The critical faculty comes out in co-operation—but sometimes it is dangerous. A man with an intuitive sense may be bowled over by criticism, and, although he feels that logically the criticism may be sound, he yet feels within himself that there are more than two sides to the question. Some-

times, too, you find a man, even when not working in partnership, who may not even be a good draughtsman but who is influencing for good his surroundings, and the young men who pass through his hands, and that his personality is impressed on everything that comes out of his office, on everything his assistants do.

Some partners co-operate in a particular way: one partner has certain qualities, and the other certain other qualities, and they early recognise their strength and their weakness. In other cases you find partners working in a more individual manner: where one man gets a job, he leads in that job, and but rarely consults his partner: the partner always being there to be consulted; and even though, on account of twentieth century conditions, they may find it desirable to work in partnership, yet they retain their own individuality, and thoroughly master their individual jobs, merely having their partner in reserve. When groups of men are working together, they influence one another, and sometimes their tastes have much in common after such co-operation.

THE CHAIRMAN: Do you think that would be the case if the partners are from different schools?

MR. NIVEN: I think they are bound to come closer together from sympathetic relationship after some time.

PROFESSOR LETHABY: May I turn for a moment to this question raised by Mr. Lanchester? It is very interesting. The French carry forward a great body of tradition in their architectural work. For myself, I think they are both the greatest and, in a sense, the most backward in the world now. Of course, they carry forward this wonderful body of experience in all their work: in planning, in their own methods of workmanship, and even in the school methods of drawing. It is a wonderful system of getting rapid work, direct work, and so on. But along with it—partly because they have never, as yet, apparently been broken up by what we were broken up, by the so-called "Gothic Revival"—they are drifting into scepticism. They still carry forward their presuppositions, and along with the greatest skill and gift and attainment they are, to me, the weakest in æsthetic doctrine: they are fifty years behind, except in the teaching of Viollet-le-Duc, of course. Mine is an individual view, and I am probably wrong: it is that the French are at once enormously in advance, and carry forward this valuable body of splendid tradition, and alongside with it is a body of exceeding thin intellectual and architectural twaddle meaning nothing at all. And to take up a work like that of Guadet is simply to come upon an astounding revelation. He knows everything in the world, yet alongside the most perfect and penetrating criticism on architecture, the selection of examples, and so on, you come upon the most unbelievable imbecility in the next page. And it all goes down in the Dictionary of Architecture as, apparently, of the same value. They have not gone through the stage of disruption which we

have, and which the Germans have, and which the Belgians have, and which more or less the Americans have too, although they are founding very largely on the French. It is on that I venture to protest, the taking over of the French body of doctrine into our schools alongside of their magnificent tradition of practice. Let us not take over their false æsthetics and their talking about concepts, and programmes, and so on. These matters should be approached, I think, as the designing of a battleship is approached. A house contains other things: it needs to be finished with skins of plaster and, perhaps, wall-papers, and, possibly, hung with pictures: but the problem is essentially the same as that of the battleship, and we are not doing sufficient because we do not look directly at the problems. If we had considered perfect cottage building during the last hundred years, we might have been able to build a cottage, which we certainly cannot at present. Most people live in small houses. If we had looked at the problem of house-building, we might have been able to build a small house such as we would like to live in. But nobody can build a sound house. There are still such small things as cracked ceilings and damp walls, smoky grates, bad floors, draught and dark.

MR. NIVEN: I have been privileged to do some work in France, and one finds there that the ordinary workman has a knowledge of tradition. If you leave anything out in a drawing, we know the mess the British workman makes of it. But the French workman cannot go wrong on certain lines: it is in him. And we find the people generally much interested in architecture. If anything new is going on in a town, the people make time to see how it is going on, and expressions of opinion are clearly given. They also are interested in the history of the subject. A man who was engaged in breaking stones by a roadside began telling me one day about the Field of the Cloth of Gold and the times of Francis I. and Henry VIII. The ordinary working man in France has an amazing knowledge of artistic things, of history and of tradition.

MR. JEMMETT: In reference to what has just been said, I was sketching Notre Dame from the quay, when an ordinary workman came along and asked me whether I had noticed that one tower was slightly wider than the other? He seemed to know all about Notre Dame. I have been told that the Paris workman is a thorough craftsman in his way, and in some respects is far ahead of the English.

I was interested in what Mr. Lanchester said as to the importance of cultivating the faculty of observation. If we had been taught to know what a thing was when we saw it, we should learn, in time, what architecture was when we saw it: we should no longer have ideas derived from incorrect observation. If we co-operated more we should not be so often misled by

seeing a thing from our own incomplete point of view. I take it that architecture can be seen from an infinite number of points, and that the view from each point can be correct, so far as it goes. But if we want a comprehensive all-round view we have to see through the other man's mind too, as well as see more accurately with our own eyes. One can only see one aspect of a building at one time, and if you stay on that side, and do not walk round the building, you never get anything like a complete view. And where we find a difficulty in gathering what the other person is talking about, and the expressions he uses seem meaningless to us, it is perhaps because we do not realise what the other man sees from his point of view.

Professor Lethaby commented on some terms I used. In particular he referred to the term "concept." It is a word I do not use as a rule. I used it on the present occasion just because I thought others would understand the term, and so realise what I was driving at. I always think there is something at the back of the terms a man uses. If he talks about expressing his "ideas in terms of architecture," it is because he has ideas and thinks architecture a suitable medium for their expression. Another man may not think architecture can express ideas, or if he thinks it can he may think it ought not to do so. To him this expression may be meaningless or even misleading. But as it happens I want to express my ideas about life, and I certainly feel that the whole truth has not been stated when anyone tells me that in talking of expressing my "ideas in terms of architecture" I am simply using a catch, and I think many architects at the present day have this feeling. We need very much the power and method of expression. Many people will tell you there is no finer medium than architecture for the expression of ideas, but they do not tell you how to use the medium to this end. What we are working for is to find out how to do it; to establish the method by which we can express ideas and feelings, as in music or literature. That is a point on which French architecture appeals to me more than the English. It is not a question of taste. What matters to me is that which is behind it all: the system, the method, the philosophy by which the ideas are expressed. With regard to "group personality"—what Professor Lethaby calls "Committee architecture"—my feeling was that most of the great buildings of antiquity, from the Parthenon to Notre Dame, express rather the personality of a group than that of a single individual.

THE CHAIRMAN: This is a very comprehensive subject, and we have dealt with only a small part of it to-day. Looming in the distance there is the co-operation of the architect with the structural engineer, and all sorts of similar matters, and I think the consideration of that aspect, at some time, would be a very beneficial thing. We are extremely obliged to Mr. Jemmett and Professor Lethaby.

ARCHITECTURAL EDUCATION FOR ARCHITECTS AND THE PUBLIC.

By W. S. PURCHON, M.A. [A.].

ONCE more the reports of the R.I.B.A. Informal Conferences make one regret inability to be present at meetings which must clearly have been most inspiring. The period immediately preceding the war was an extremely critical one for architecture and architectural education in this country, and from these conferences it may surely be inferred that the crisis is passing, and that we shall not resume the *status quo ante bellum*. The dangers in those days which now seem so far away were that present needs might be sacrificed to past methods, that external appearances might be considered the ultimate aim of our art, that we might be so carried away by our enthusiasm for brilliant draughtsmanship that we should forget the actual solid building, that we should literally grasp at the shadow and lose the substance, and that real education in architecture would be sacrificed to the acquiring of a fatal facility in the representation of fashionable façades.

During this period those who upheld the then discredited theory that beauty in architecture is more than skin deep, that in fact the highest form of beauty in our art is impossible apart from sheer efficiency, were in an apparently hopeless minority; but these conferences provide a clear indication that the value of the more thorough study which they advocated is gradually being understood and appreciated.

The war has undoubtedly brought many into contact with the hard facts of life in a manner which they had never previously experienced; it seems clear that much that was shallow and flippant in pre-war days must give way to a sterner and grander vision, and in architecture as well as in the arts of sculpture, painting, literature and the theatre we may surely look forward with confidence to a period of great achievement as a result of this finer and nobler outlook. If, however, our art is to come into its own in the years which are yet to be, it will largely be as a result of our taking the right steps during the plastic period which is coming, if indeed it is not already with us. The architectural problems of the future will not be easy ones; this at least will be obvious to all who are studying the tendencies of modern scientific building; and architecture will take its rightful place in life to the extent to which it grapples seriously with the problems put before it. Smart draughtsmanship will not save the situation, painfully accurate delineation of shadows will be of little avail, while the musty atmosphere of the early years of the last century must be replaced by a more bracing air if our art is to become vital.

What, then, shall we do? How, then, shall we train our students? The answer to the first question is, I think, that we should try to realise as clearly and fully as we can the changes which are inevitably coming over our art, and to the second that we should

so equip our students that they will be in a position to tackle the new problems in a serious manner. We have made an excellent start by abandoning our Preliminary Examination, and the path is thus open for us to stiffen up gradually the conditions under which candidates may take the Intermediate. It will, in the near future, be of increasing importance that a good standard of general education is reached before professional education is commenced.

In the actual teaching of architecture modern methods of construction and modern ideas of sanitation should play a large part. The architects of the future must be able to understand ferro-concrete and its possibilities; they must not look upon it as something provided by someone else, something which in some way or other they are to hide away in the building they have previously designed. They must understand something about ventilation, heating, lighting and acoustics, and here again they must realise that these are essential parts of architecture, not something added to their building by a "sort of sergeant chappie."

The study of the history of architecture should be undertaken largely with the object of showing how changing problems growing up out of varying conditions have been met by the architects of the past. The degree of success with which the problems have been tackled should be carefully noted, and special attention should be drawn to the differences between modern conditions in England and those of other countries and other days. Measured drawings should be far more serious matters than they have usually been in the past; they should be genuine studies of worthy buildings, studies which will be of value to the student who makes them, and which will, because of their absolute accuracy, be of real value as records.

Design should be in some measure a kind of sum of the above studies. In each case there should be a definite and serious attempt to solve in every detail a real problem, and the success of the effort should be measured not by the general appearance of the drawing or by the skill with which the student has avoided the real issue, but by the degree to which, if constructed, it would prove a satisfactory solution of the problem.

If we take up the work of architectural education in this deeper and more serious manner, we shall not ask which school can do the designs for the R.I.B.A. Final in the first or second term, but which school is carrying out the most serious investigations, and which school is helping to make the men best fitted to tackle the varying problems which will be put before them in after years. We shall not worry because it is not possible to carry out studies on the suggested lines in three years, but we shall agree that certain studies are essential, and devote the necessary time—probably five years—to them.

If we are anxious that our profession shall receive the recognition given to other professions, we should not begrudge the making of similar sacrifice. The

Medical course is five years in length, and I see no reason why ours should be shorter. The more fully we realise the importance of thoroughness in our studies the more completely we shall appreciate the value of the University Schools of Architecture. For hardly anywhere else can the student get from men of standing the increasingly necessary teaching in pure and applied science, and the equally necessary contact with students who are *not* taking a course in architecture.

A further point raised in the recent conferences is the important one of educating not ourselves, but the public. The R.I.B.A. should certainly appoint a committee to consider this matter. Its investigations would soon show that the Press is perfectly willing to help, providing suitable "copy" is produced by the architects, and that the public is keenly interested in architecture if it is treated as a living art which is now, as it was in the past, an integral part of civilisation.

THE EDUCATION OF THE ARCHITECT.

On reading, in the September issue of the JOURNAL, the report of the discussion on the Education of the Architect, at the Seventh Informal Conference, held on the 2nd of May, I feel tempted to offer a remark or two, belated though these must be.

Both Professor Pite and Professor Dickie, speaking in anticipation of coming changes and reform in the administration of educational affairs by the Institute, advocated the better recognition by the Examination authorities of the teaching bodies throughout the country, and closer consideration of their needs and difficulties in connection with the educational work they are doing for the profession. Both professors intimate how completely the freedom of the schools has come to lie at the mercy of the Institute rulers, from whose decrees the schools have no appeal. Certainly the instance brought forward by Professor Dickie, concerning the Manchester School of Architecture, is almost startling; and Manchester can hardly be singular in such experience. Surely it is getting a little late in the day for a non-teaching authority to remain free to overrule and cripple the activities of organisations that are actually engaged in doing the sorely needed work of teaching.

Professor Dickie is charitable enough to speak of the Institute as robbing the schools unconsciously; but does this mend matters? As it must be admitted that the teaching bodies who are charged with the essential work of architectural education throughout the country are deserving of fair play, at least, we can but hope that at length our rulers are in course of recovering consciousness.

I suppose that all of us who, in times gone by, ever lifted a little finger to help in the work of the R.I.B.A. Examinations have been sustained in our poor efforts by the hope that thus we might be doing our "bit" in

the cause of architectural education. Even supposing, for the sake of argument, that we were mistaken, yet we could not have contemplated the crippling of teaching. To be sure, before the general establishment of architectural schools throughout the country it was, only too often, a case of examining the untaught; but, with the schools now in existence, we ought to be able to say henceforth at any rate that the Examination is made for the schools, not the schools for the Examination.

The consensus of opinion expressed at the meeting seems to show that the time is ripe for an architectural Headmasters' conference, as suggested by Professor Simpson. Let the profession hear from the men engaged in the work of training our recruits what they collectively have to say on their own subject.

WALTER MILLARD [A.].

CORRESPONDENCE.

"The Comacine Builders."

Brian Croft, Milford-on-Sea, Hants: 3rd October, 1917.

To the Editor, JOURNAL R.I.B.A.—

DEAR SIR,—In your issue for September Sir Thomas Jackson reviews Mr. Porter's work on Lombard Architecture, and I extract the following from his criticism. "Mr. Porter, I am happy to find, does not accept the myth of the Comacine builders. It depends mainly on an edict of King Rotharis in 643, addressed to the Magistri Comacini, relating to liability for accidents arising from building. To suppose, as some have done, that a little islet in Lake Como, the Insula Comacina, was at one time the refuge of all the polite arts of Italy, is ridiculous."

If Sir Thomas Jackson refers to the last part of this quotation as "the myth of the Comacine builders," I can only say I was not aware that anybody supposes such a thing, or lays any stress on the edict of Rotharis beyond that in it the Magistri Comacini are first mentioned by name. But if he refers to the influence exercised by the Comacines over a large part of Italy, Western Europe, and even our own land, then I can only regret he should find it necessary or desirable to characterise it as a "myth" and to rejoice in Mr. Porter's share in that view. As yet I have not seen Mr. Porter's book, but since my little book on the Comacines was published in 1910 I have made these men my chief study both in Italy and elsewhere, and I have such a collection of notes as justify me in saying the word "myth" in this application is at least unfortunate. And I have also the personal testimony of other students, whose research has been carried farther than mine, notably of Professor Ugo Monneret de Villard, the archaeologist appointed by the Italian Government to conduct explorations on Isola Comacina, to the very real influence of the Comacines on the architecture of Italy and the West of Europe.

I am aware that any extensive claim for this somewhat traverses the position of those who hold to a strong Byzantine influence in Italy; but as I hope some day to publish my further notes on the subject I will not trouble you with any remarks on this point now.

Yours truly,
W. RAVENSCROFT [F.].

REVIEWS.

THE ITALIAN ORDERS.

The Italian Orders of Architecture. By Charles Gourlay, B.Sc. 4s. Lond. 1917. 6s. [Edward Arnold.]

In a sub-title, Professor Gourlay describes this work as a "Practical Book for the use of Architects and Craftsmen," and in the Preface further states his aim as being the provision of a text-book for the use of beginners as well as for reference by architects when designing and by craftsmen when executing work, while further commending it to the attention of engineers and surveyors. The contents justify the description; the author's aim is adequately achieved, especially in view of the very moderate price at which the book is issued. It contains 32 plates, 12 inches by 9 inches, Preface, Introduction and text extending to 29 pages, the latter comprising, not only a clear analysis and description of the plates, but a Foreword giving general directions for the proper setting out of drawings and other information especially useful to those students—fortunately a rapidly diminishing number—who are debarred by their circumstances from attendance at a properly constituted School of Architecture. In this, as throughout the work, it benefits by the large experience of the author as Professor of Architecture and Building at the Royal Technical College of Glasgow, though exception may be taken to the professorial inclusion, if only as being beyond the scope of an elementary treatise, of *ex cathedra* definitions, more or less debatable, regarding the broader issues contained in such expressions as Architecture, Style, Scale and Proportion.

The plates show the various Orders, from Tuscan to Composite, in full proportions as associated in colonnades, or, more frequently, combined with arched construction, also in their several details, with an added series giving balustrades, windows and doorways, ceilings, etc., all very clearly drawn and reproduced in outline only. A point not infrequently overlooked in such works has in this been rightly emphasised, namely, the consideration of the stone jointing. In this connection the fact that the bottom fillet is attached to and forms part of the shaft, while rightly shown on the plates, might with advantage have been specially noted in the text in view of the not uncommon error of placing the joint above it.

A point of more importance is the omission of all reference to the use of the entablature with the frieze eliminated, as frequently employed by the Italian

masters, as, for instance, by San Gallo in the order of the vestibule and courtyard of the Farnese Palace, also in that of the Massimi Palace by Peruzzi, and frequently to be preferred in interior design. An example of this treatment to a small scale is, indeed, included in the secondary orders of the Basilica of Vicenza, an interesting elevation of which to illustrate the superposition of arcades is provided on plate 29, but otherwise no description or drawing of the arrangement is given, while the entablature in question is somewhat misleadingly described in the text as an instance of a specially low proportion in relation to the column supporting it, without mention of the manner in which the result is achieved.

As explained in the preface, Professor Gourlay has based his rendering of the Orders on those formerly set forth by various acknowledged masters, Italian and English, without adhering to any one. The results generally are satisfactory, though the architect experienced in the handling of such traditional motives may not always find himself in accord with all the author's details. In some cases the latter finds himself unable to supply definite rules in view of the divergence of his authorities, and falls back on the statement, repeated several times in the text, that such matters depend "on the taste of the designer." A dangerous doctrine, surely, this (besides savouring somewhat of the cookery-book) to be set forth in a book addressed mainly to students. "Taste, sir," said Dr. Johnson—or words to that effect—"this is not a matter of taste, but of knowledge, sir, and of ignorance."

Apart from such minor criticisms and suggestions, the book is one to be warmly commended, not only to those making their first essays in design but to all interested in the traditional development of civil architecture, and one which, after careful study of its pages, the writer is glad to have included in his collection.

ALEXANDER N. PATERSON [F.].

Canadian Timbers for Structural Purposes.

From the Department of Trade and Commerce, Canada, has been received a pamphlet on *Canadian Woods for Structural Timbers*, prepared at the Forest Products Laboratories under the auspices of the Forestry Branch of the Department of the Interior, Canada. The work is the outcome of an investigation, conducted in co-operation with McGill University, into the qualities of the woods of the various species of trees in Canada, with the object of affording reliable and authoritative information as to the strength, durability and other qualities of Canadian wood and their adaptability for use in structural work and manufactures of various kinds. Mr. Harrison Watson, Canadian Government Trade Commissioner, writes that he will be happy to forward a copy to any member of the Institute who will write to him at his office, 73, Basinghall Street, E.C.2.

THE LATE LIEUT.-COL. VICTOR FLOWER, D.S.O. [*Licentiate*].

I AM happy in having the opportunity to add a few facts and dates to the short notice of Colonel Victor Flower which appeared in the last number of our JOURNAL. But in sitting down to put these records together I feel how strangely inadequate is any mere chronicle of events to tell the story of a life at once so pathetically short and so complete in achievement.

Good soldiers, I suppose, are born, not made; to many of them in times of peace the announcement of their birth as soldiers never comes. To many in these days of war it has come with a surprise and with amazing pleasure. To our friend Flower there came, as I hope, the pleasure of this discovery but perhaps not the full measure of surprise, for the life of military discipline had always been to him one of the happy interests of his earlier manhood, and it was owing to his industrious work as a capable volunteer that when the war broke out he entered the London Regiment with a commission as Captain, having already laid the foundation of his brief and brilliant career as a soldier on active service.

It was in January of 1876 and in Westminster Abbey that Victor Augustine Flower was baptised by Dean Stanley, the Dean himself and Lady Augusta Stanley being two of his sponsors. He was the third son, as already related, of Sir William Henry Flower, K.C.B., the talented zoologist, who in early life saw active military service as an army surgeon in the Crimean War and whose later years were so successfully employed in the control (1884-1898) of the Natural History Museum. Colonel Flower's mother, still living, was Georgiana Rosetta, daughter of Admiral Smyth. His first school was Eagle House, Sandhurst, and he went thence in September 1889 to Morshead's House at Winchester. His time as a Wykehamist must have been somewhat shortened by a desire to get to the business of life, for he left the school in December 1892 and was for a time engaged in engineering studies. His first definite architectural training was in the office of his brother—an old friend of my own—Arthur Smyth Flower, who had been a pupil in my father's office; and Victor, after a short spell of work with Prof. Roger Smith, finished his architectural preparation by coming to us. It was in the years 1895 and 1897 that he worked in the office, and I find on looking up the records that he was engaged on drawings for some seven or eight different buildings. Two of them were hospital works and two others college buildings. He was not a pupil, but came for experience. I feel not a little proud to think that our period of friendship at 20 New Cavendish Street entitles me to reckon this distinguished soldier as among the little band of fighters who have gone out from the Waterhouse office. How well I remember his tall figure, his mature dignified face, his steady work and his quiet manner. How little I then foresaw

the distinction, the renown and the success that were to come to him in a line of work so unlike architecture—and yet like; for the architect is a master craftsman, and it was as a controller of the craftsmen of war that he put honour to his name and to the dear name of England.

A few years after leaving our office Flower had an opening in the firm of Swan & Maclaren at Singapore, and he joined them in February 1900. His career there was not merely successful professionally but gave him many opportunities for various sports and athletic exercises in which he was proficient.

On the 21st May, 1914, after his return to England, Flower married Winifride, youngest daughter of Sir Digby Pigott, C.B., an event which seemed at the time to presage the opening of a settled and successful life in England, but which, as events proved, added to the pathos and to the heroism of his ready response to the call of his country.

The opening of the war coming upon him at the age of thirty-eight found him younger than many of his juniors in physical strength and indomitable energy. The chance of actual soldiering, and the sudden call for trained men, were not appeals to which he of all people could be indifferent. He was but newly and very happily established in married life in England, yet professional prospects and home ties were unselfishly set aside and it was in a battalion of the London Regiment that he found himself gazetted as Captain. His powers as an officer were at once apparent, and promotion was correspondingly rapid. In the autumn of 1915 he was transferred to another battalion and went out to France with the rank of Major. By December of the same year he had been gazetted Lieut.-Colonel. He was twice mentioned in Despatches and received the D.S.O. He was at the Front continuously till January last, when he was invalided home. After his recovery he was appointed to the command of his original battalion and returned to France. The officers and men of his old battalion, as well as those who served with him in the new, hold in warmest reverence the memory of his fine character as an officer. One who knew him well spoke of him as possessing the "essential qualities of a commanding officer" more than anyone he knew. His death must have occurred on the 15th August; he was killed instantaneously by a shell while watching his men move out to a relief—those men who thought so highly of him.

"He was thought a great deal of by the Major-General and his Brigadier": this was proudly admitted by some of his regimental friends with a touching reservation that their own affectionate opinion of him was closer and more intimate. "Mourned by all ranks in the unit," said one, and "an exceptionally strong, clear-headed soldier."

There was a pathetic rivalry between the battalions in the care of his grave. His newer comrades having erected a cross, the old friends came and put a railing round it.

Can one think of a broken column as symbolising such a death? I hardly think so. The end of that life was no ragged breaking off, but rather the triumphant placing upon base and shaft of a capital unexpected perhaps in form but showing when set in position the perfect whole for which shaft and base were all unknowingly devised. *Finis coronat opus.*

PAUL WATERHOUSE [F.].

THE LATE 2ND LT. C. J. M. COWDELL [A.].

"Blow out you bugles over the Rich Dead."

On the 12th September there passed to join the great company of the glorious dead Charles Joseph Morton Cowdell, killed by shell fire whilst in the execution of his duty as an officer of Engineers on the blood-drenched fields of France. One of the first to answer the country's call for men, he eagerly undertook the great adventure and joined in the September of three years ago the Universities and Public Schools Battalion as a private. With them, having undergone the lengthy training to which they were submitted, he served in the trenches in France. Later, receiving a Commission in the Leicestershire Regiment, he took part in heavy fighting during last year's offensives. Then came a special course of instruction in England, after which he was transferred as Second Lieutenant to the Royal Engineers, and again proceeded to France on the service in which he has given his life. In him the Engineers lose a most capable Officer and the Institute an Associate of promise. From the Wyggeston School at Leicester he had passed to the office of his father, Mr. W. M. Cowdell [F.], in that city. During his five years there as a pupil he was a successful student and prizeman in the Leicester School of Art. A clever draughtsman and keen sketcher, as the result of various expeditions chiefly in the West of England and in France he on several occasions won prizes for sketches offered by the Leicestershire Society of Architects; he was also a bronze medallist of the Science and Art Department, South Kensington, in Architectural Design, and in the Institute Final Examination had taken a very high place. Later he spent some years in gaining varied experience in the offices of other firms, amongst which were those of Messrs. Heazell & Sons, of Nottingham, and Messrs. Bradshaw, Gass & Hope, of Bolton, the latter of which he left to join the Army. He was elected Associate of the Institute in 1912.

A young man on the threshold of his career, gifted, and with a mind well stored for the practice of his craft, a capable workman and with fine artistic sense, his friends had great hopes for his future. But high though these were, it is for himself—for his lovable personal qualities—that they mourn him most. His honest uprightness, his kindness of heart, his whimsical sense of humour, his loyal friendliness and thoughtfulness for others—the simplest, though by no means the most common, virtues of life—these brought him the deep respect and regard of his

fellows. Can one say more than that C. J. M. Cowdell was in the best and truest sense of the much-worn words an "officer and a gentleman"?

JOHN B. GASS [F.].



9 CONDUIT STREET, LONDON, W., 20th October 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-eighth List.

Fallen in the War.

BARKER, Private THOMAS CHRISTOPHER. Yorks Regiment, Member of the Scarborough Town Council [*Licentiate*]. Accidentally killed at the Front on 4th August. Aged thirty-six.

COWDELL, 2nd Lieut. CHARLES JOSEPH MORTON, Royal Engineers [*Associate*, 1912]. Killed in action on 12th September. Son of Mr. William M. Cowdell [F.], of Leicester.

GARRATT, EDWARD [*Licentiate*, *Pugin Student*, 1905]. Killed serving at his battery in Flanders on 11th September.

HILL, Staff-Sergeant CLAUDE EDGAR, R.A.M.C. [*Associate*]. Killed in action on 3rd September.

MOODIE, 2nd Lieut. JOHN [*Student*, 1908], Seaforth Highlanders. Died of wounds in France, 27th August 1917.

Second Lieut. Moodie received his architectural training principally at King's College, London, and, after experience in various offices, was assisting Mr. Alan Brace, of Old Buildings, Lincoln's Inn, when war broke out. In the spring of 1915 he joined the London Scottish, subsequently took the Cadets' course at Trinity College, Cambridge, and received a Commission in the Seaforth Highlanders. After three months' active service in France (Somme district) in 1916 he was invalided home with trench fever, and later operated upon for appendicitis. Returning to France upon his recovery he took part in an action on the 22nd August, 1917 (his 30th birthday), receiving two bullet wounds, from which he died in hospital five days later. He worthily upheld the honourable traditions of his family, and his strong, manly qualities, attached to an amiable disposition, cause his loss to be much deplored by his friends.—FREDK. R. HIGGINS [A.].

Members' Sons.

DINWIDDY, Major CONRAD HUGH, Royal Garrison Artillery. Died of wounds, aged thirty-six. Fifth son of Mr. Thomas Dinwiddy [F.]. Mr.



Lt.-Col. VICTOR FLOWER, D.S.O., *Lieutenant*.
London Regiment.
Killed in action (see p. 273).



2nd Lieut. WILLIAM WYLIE HOUSTON, *Associate*.
Royal Engineers.
Killed in action (see p. 267).



Private THOMAS CHRISTOPHER BARKER, *Lieutenant*.
Yorkshire Regiment.
(Formerly Scarborough Town Councillor.)
Accidentally killed at the Front (see p. 280).



2nd Lt. CHARLES JOSEPH MORTON COWDELL,
Associate. Royal Engineers.
Killed in action (see p. 280).

Dinwiddy has still three sons in the Services—Commander Dinwiddy, R.N., Major Malcolm Dinwiddy, Royal West Kent Regiment, and Lieut. Norman Dinwiddy, R.N.V.R. [F.].

BATH, Staff-Sergeant LESLIE VIVIAN HURLE, R.F.A. Killed in action in France on 23rd August. Youngest son of Mr. Fred Bath [F.], of Salisbury.

Military Honours.

FISHER, Captain STANLEY HOWE, R.E. [A.], has been mentioned three times in Despatches, and has been awarded the Military Cross.

Serving with the Forces.

Intimation has been received that the following are serving, bringing the total to 77 Fellows, 532 Associates, 330 Licentiates, and 298 Students:—

FELLOWS.

Healey, A. J.: Machine Gun Corps Motors.

ASSOCIATES.

Black, Herbert: Australian Engineers.
Harrison, J. A.: Canadian Engineers.
Mackenzie, H. B.: 2nd Lieut., Royal Engineers.
Wade, F. W.: 2nd Lieut., Royal Engineers.
Stretton, Clement: Royal Naval Air Service.
Conder, A. R.: 2nd Lieut., Equipment Officer, R.F.C.

LICENTIATES.

Cheetham, H.: Royal Engineers.
Barbour, John: R.F.A.
Horne, D. E. A.: Lieut., Labour Corps.

Promotions.

Mr. F. C. S. Harrison [Student] has been gazetted 2nd Lieut., Durham Light Infantry.

Mr. J. H. Chalkley [Student], late of the London Regt., has been gazetted 2nd Lieut., Machine Gun Corps.

2nd Lieut. L. Sylvester Sullivan [A.] transferred from the Royal West Surrey Regiment to the Labour Corps in April last and is now Acting Captain.

Mr. Harry R. Finn [Licentiate], who joined the Royal Engineers as a Sapper in July 1916, was granted a commission as 2nd Lieut. in January 1917 and was recently promoted to Lieutenant.

Mr. Charles Woodward [A.], son of Mr. William Woodward [F.], has been gazetted 2nd Lieut., Army Service Corps.

The Future of Architecture.

Mr. John B. Gass [F.] discussing the future of architecture in his Presidential Address to the Manchester Society, said:—

As democracy will rule, the fostering of a rightly informed and cultivated mind among the people will bring about a true civic spirit, which will stir up amongst the inhabitants a pride in their cities, towns and villages and be of incalculable value for the future of architecture. To the children, architecture and history should be taught together in all the schools as part of the general educational course, for history is expressed in architecture, and both would be made more interesting and living by a true combination. The future would be more hopeful by understanding minds then seeing the expression of their own time in the buildings growing up around them, and by the insistence on the expression being right and true. The

Institute's Memorial of July last to the President of the Board of Education is one of the marks of the awakening spirit in our midst. It welcomes and urges the encouragement of the natural activities of eye and hand in the teaching of our day schools. It specially asks that all should be taught to draw, that provision should be made for manual work, and that comprehension of the common duties of life should be infused into their minds; that a town spirit should be inculcated as the best basis on which to build up a national spirit, and that something should be done to bring out the idea of design and strengthen initiative in the minds of the children. With a democracy truly educated in that spirit, and profiting by it, all things grow possible; thought's range gives a wider scope than now with the narrow view which prevails. Citizenship will have a real meaning and the communal feeling be more fully developed in the civilisation of the coming time. A sense of the values of surroundings in the minds of the people for their living, their education, their work, their religion, and their pleasures will infuse life into architecture which will then dare to confront and break through the old and the time-endured while profiting by their good examples.

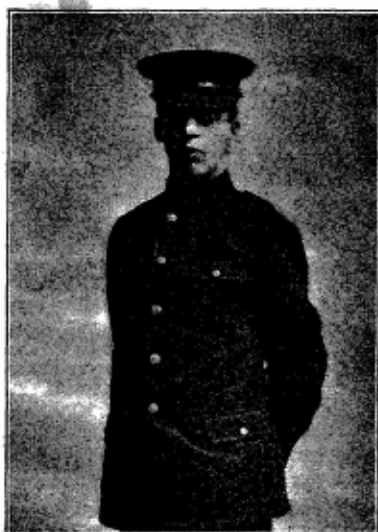
The higher the outlook of the nation the greater the training and skill required by those who express it in the architecture of the time. For our profession to hold its place in the ever-quickenning march of events, a general high standard will be even more necessary than at present. All endeavour must be made to make the profession of architecture attractive to the best of the young men of the nation, and then see that the highest special educational facilities are placed within the reach of those who can profit by them; for on the ability of the student to profit by special education depends the success of that education and its practical value in the world. There have recently been discussions at the Institute on architectural education which have been very interesting. The virile suggestions from the Architectural Association School have an artistic as well as a practical outlook on the present and on the future, rather than the over-worship at the shrine of the past. It was well stated that schemes of architectural education will always remain schemes unless they coincide fairly with the sense of values of the nation at large, and also that the constructive side and artistic side of education should be run together. With both of these statements I am in full agreement. Many of the speakers, however, dealt mainly with the theoretical, both artistic and scientific, part of professional training, which is only the beginning of an architect's education. Little was said of the vital necessity of a thorough training in the practical and business side of our profession, the only way to make a college or special school education of the real help in a man's career that it ought to be, and preventing his having a true and not a false sense of values. An architect has to be in touch with actualities, and the use of practical common sense with experience are essential to a successful career. My personal experience of college-trained youths is not very convincing unless such training has been simultaneous with office work, when it is of the greatest help and leads to efficiency. It is probable that the education of the future will have to take into account the State and military service which will be required from our young men at the most impressionable and valuable time of their lives; one, two or three years from the age of about eighteen. In the future arrangements of State service consideration should be given to students in all the learned professions so as to make their specialised training of value to the State. The effectiveness of the scheme of architectural education and the personal capacity of the students will be important factors in determining how far such consideration will be given to our profession and maintained. The branch of State or military service which will utilise the specialised preliminary training and enable our students to take it forward should be organised in the national interests. . . .



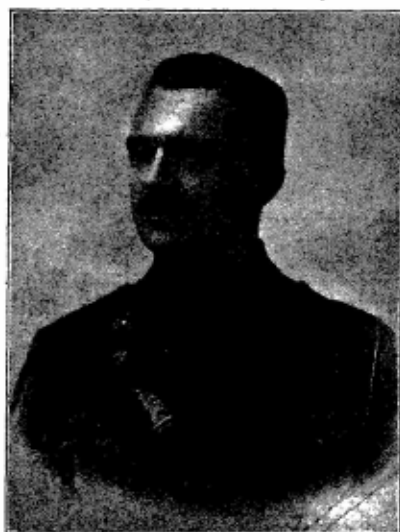
2nd Lieut. **Cecil Lawrence Wright**, *Associate*
Royal Garrison Artillery.
Killed in action (see p. 241).



Captain **Charles William Eaton**, *Associate*,
Leicester Regiment.
Died of wounds (see p. 241).



Lance-Corp. **David Lang Meirleham**, *Associate*,
Royal Engineers.
Killed in action (see p. 267).



2nd Lieut. **John Hardy Wilson**, *Licentiate*,
Sherwood Foresters.
Killed in action (see p. 267).

Housing Problems after the War.

Under the auspices of the University of London, Professor S. D. Adshad [F.] will deliver at University College, Gower Street, on Tuesdays at 5 p.m., beginning 6th November, six public lectures, illustrated by lantern slides, on Housing Problems after the War. At the first lecture the Chair will be taken by the Right Hon. Christopher Addison, M.P., Minister of Reconstruction. Application for tickets, accompanied by a stamped and addressed envelope, should be made to the Secretary, Mr. Walter W. Seton, D.Lit., at University College.

NOTICES.

The President's Opening Address, 5th November.

THE FIRST GENERAL MEETING (ORDINARY) of the Session 1917-18 will be held Monday, 5th November 1917, when the Chair will be taken by the President, Mr. Henry T. Hare, at THREE P.M. precisely, for the following purposes:—

To read the Minutes of the General Meeting (Ordinary) held Monday, 25th June; to announce the names of candidates for membership; formally to admit members attending for the first time since their Election;

Mr. HENRY T. HARE, President, to deliver

THE OPENING ADDRESS OF THE SESSION.

Election of Members, 3rd December.

Application for election in the classes indicated have been received from the undermentioned gentlemen. Notice of any objection or other communication respecting them must be sent to the Secretary R.I.B.A. for submission to the Council prior to Monday, 5th November.

AS FELLOWS (10).

CRANFIELD: SYDNEY WHITE [*Associate*, 1892], 14 Gray's Inn Square, W.C. Now serving with the Colours.

Proposers: Edwin Cooper, Henry V. Ashley, and Fred. W. Marks.

***HARVEY:** WILLIAM ALEXANDER [*Licentiate*], 5 Bennett's Hill, and Linden Road, Bournville, Birmingham.

Proposers: Ernest Newton, Arthur Keen, Chas. E. Bateman.

***JONES, FRANCIS** [*Licentiate*], 178 Oxford Road, Manchester; and Blackraig, Knutsford.

Proposers: Percy S. Worthington, Isaac Taylor, and Paul Ogden.

***MORRISH:** WILLIAM JAMES MARMADUKE [*Licentiate*], Wyke Road, Gillingham, Dorset.

Proposers: Charles B. Pearson, Charles T. Miles, and the Council.

NICOL: GEORGE SALWAY [*Associate*, 1903], King's Court, 117 Colmore Row, Birmingham; and "Manresa," Vernon Road, Edgbaston.

Proposers: Chas. E. Bateman, Arthur Harrison, and Alfred W. S. Cross.

NICOL: JOHN COULSON [*Associate*, 1887], King's Court, Colmore Row, Birmingham; and Elmdon Lodge, Acocks Green, Birmingham.

Proposers: Arthur Harrison, John P. Osborne, and Alfred W. S. Cross.

***POWELL:** ROBERT SIDNEY [*Licentiate*], 11 St. Mark's Square, N.W.

Proposers: John Hudson, Fred. W. Hunt, and Arthur Ashbridge.

***RUTHEN:** CHARLES TAMLIN [*Licentiate*], 5 Northampton Gardens, Swansea.

Proposers: Ernest Newton, Henry T. Hare, and E. Vincent Harris.

SMALLMAN: HENRY RICHARD GEORGE STRONG [*Associate*, 1905], 8 Queen Street, Cheapside, E.C.; "Kemer-ton," Rosebery Road, Sutton, Surrey.

Proposers: H. D. Searles-Wood, J. Douglass Mathews, and Henry T. Gordon.

TICKLE: ARTHUR GEORGE WARMHAM [*Associate*, 1911], Public Works Department, Hong Kong.

Proposers: Sir Aston Webb, R.A., Sidney Perks, and J. Douglass Mathews.

* These candidates have passed the Examination qualifying for candidature as Fellows.

AS ASSOCIATES (5).

BREESTON: HUMPHREY ALBERT [*Student*, 1904], State Buildings, East Division, P.W.M., Cairo, Egypt; and 9 Sharia Kas-el-Nilm, Cairo.

Proposers: Frederick Chatterton, Robert Williams, and the Council.

COATES: HAROLD FENWICK [*Special Examination*], 47 Queen Street Melbourne, Australia.

Proposers: W. A. M. Blackett, Edward A. Bates, and H. W. Tomkins.

HENRIQUES: ELIAS COSMAS [*Special Examination*], Bombay, India; and 21 Cromwell Road, South Kensington, London, S.W.1.

Proposers: Charles E. Varndell, James Ransome, and Robert Atkinson.

HOPE: ARCHIBALD CAMPBELL [*Special Examination*], 70 Howard Park Avenue, Toronto, Ontario, Canada.

Proposers: F. S. Baker, W. E. Vernon Crompton, and W. J. Morley.

RAYSON: THOMAS [*Special Examination*], H.M. Office of Works; and 179 Park Lane, Tottenham, N.17.

Proposers: N. W. Harrison, Alfred W. S. Cross, and Professor Beresford Pite.

Arrangements for the Session, 1917-18.

INFORMAL CONFERENCES, AT 3 P.M.—

1. 22nd Nov.—The Function of an Architectural Society. *Opener*, Mr. Sidney Webb; *Chairman*, Mr. Henry T. Hare, President.

2. 5th Dec.—Unity of the Profession. *Opener*, Professor F. M. Simpson [F.]; *Chairman*, Professor W. R. Lethaby [F.].

3. 9th Jan. 1918.—Co-operation amongst Architects, and Specialisation. *Opener*, Mr. H. V. Lanchester; *Chairman*, Professor Beresford Pite [F.].

4. 13th Feb.—National Policy of Town Improvement (Conference with Public Men and Writers). *Opener*, Mr. Clutton Brock; *Chairman*, Sir Aston Webb, K.C.V.O., C.B., R.A. [F.].

5. 13th March.—National Housing and National Life. *Opener*, Professor Adshad [F.]; *Chairman*, Mr. W. R. Davidge [A.].

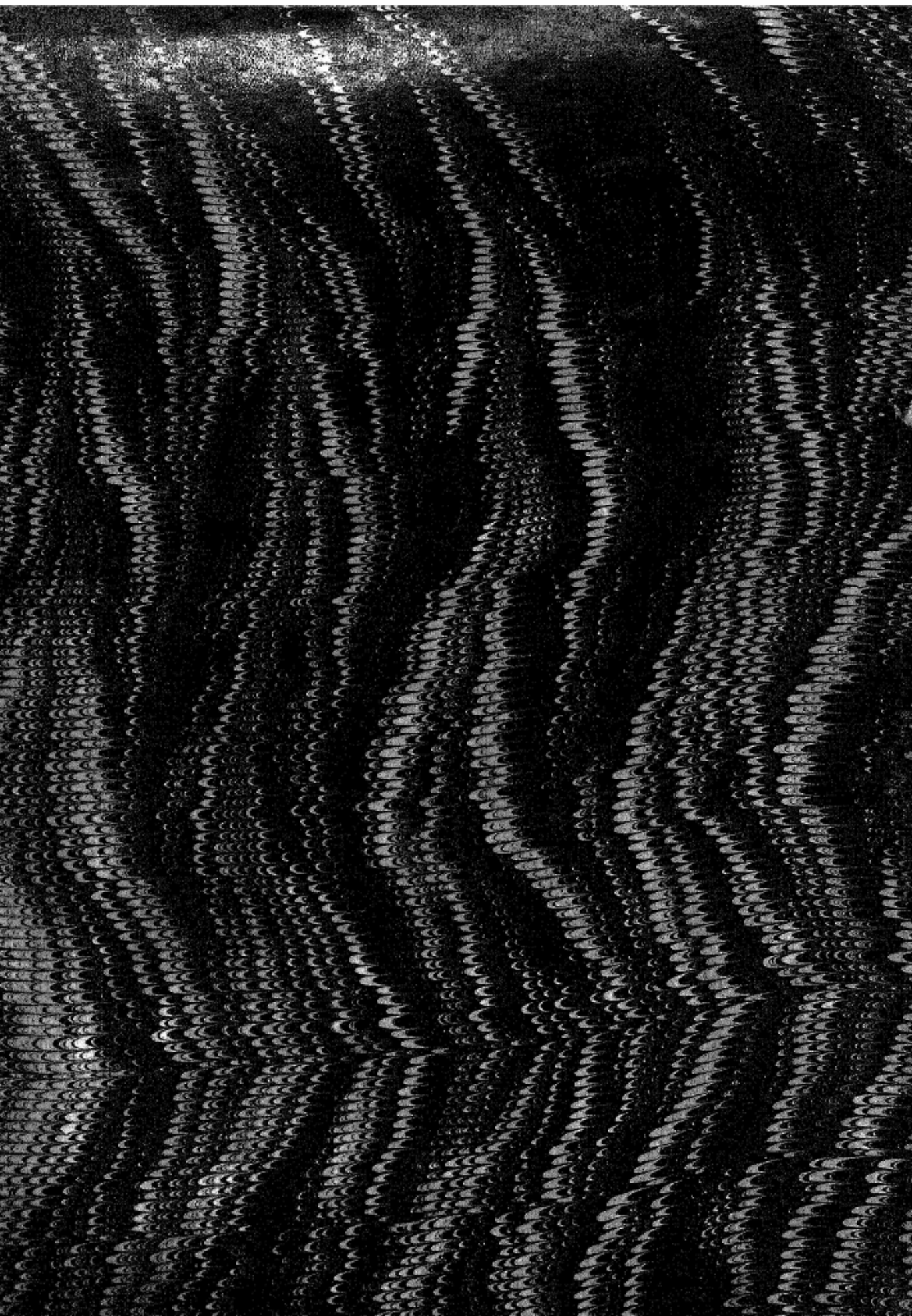
6. 10th April.—Relations of Architecture and Engineering (Conference with Engineers). *Opener*, Professor W. R. Lethaby.

7. 8th May.—Quality of Work and the Present System of Competitive Tendering (Conference with Builders and Workmen). *Opener*, Sir J. J. Burnet, R.S.A., LL.D. [F.]; *Chairman*, Mr. H. V. Lanchester [F.].

8. 12th June.—Proposed Parliament of Building Trades.

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